California Regional Water Quality Control Board
Santa Ana Region
April 26, 2002

ITEM: 12

SUBJECT: Order No. R8-2002-0014, Waste Discharge Requirements for Sewage Collection Agencies in Orange County Within the Santa Ana Region

INTRODUCTION:

There is a significant public health threat from the microbial pollution problems in ocean waters along the Orange County coast. Orange County has some of the most valuable beaches in the country, not only because of the large number of visitors, but also because of the revenue these visitors generate for the local businesses and the municipalities. From Seal Beach to San Clemente, there are approximately 42 miles of coastal beaches and a total of 124 miles of coastal and bay beaches. This translates to 45,260 available beach mile days per year (beach mile days=miles of beach X number of days). Approximately 60% of the beach mile days in Orange County are within the Santa Ana Region, with the remainder in the San Diego Region.

Since 1999, there have been a total of 146.8 beach mile days of beach water postings (warning) and closures (access prohibited) in Orange County. Between January 1, 2000 and August 31, 2001, the Orange County Health Officer closed portions of Seal Beach, Sunset Beach, Bolsa Chica State Beach, Huntington Harbour, Huntington City Beach, Huntington State Beach, Newport Beach, Newport Slough, and Newport Coast to body contact recreation on 31 occasions. All storm drain outlets into the ocean are posted, warning the public that the water may be contaminated. In addition, the Health Officer posts the areas where testing indicates that the water quality objectives for bacteria are exceeded.

To date, studies have indicated that beach water closures and postings cannot be linked to any single source. There are a number of suspected or potential sources that cause water quality impairment of ocean waters in Orange County. These include sewage spills and leaks, urban runoff, Orange County Sanitation District's (OCSD) ocean outfall, AES power plant discharge, boats, vessel pump out stations, septic systems, coastal wetlands and marshes and wildlife. However, the 31 beach water closures indicated above were all due to sewage spills or leaks that reached or threatened to reach ocean waters.

The Regional Board currently regulates urban runoff, OCSD's ocean outfall, and the AES power plant discharges. Until now, the sewage collection agencies in

the Region have not been regulated under waste discharge requirements or a NPDES permit. The sanitary system overflows (SSOs, sewage spills and leaks) that result in a discharge of sewage to surface water bodies are prohibited by the Basin Plan, the California Water Code, and the Clean Water Act. . According to the United States Environmental Protection Agency (USEPA), "Final Report, Sanitary Sewer Overflow (SSO) Workshop", August 1995, workshop participants agreed that most dry weather SSOs were preventable and can be eliminated, and most wet weather related SSOs can be significantly reduced by adequate management, operations, and maintenance programs. Where wet weather SSOs cannot be eliminated, cost-effective storage and treatment options are available.

Based on the finding that most beach water closures in Orange County are due to SSOs, and the fact that most of these SSOs are preventable, this order proposes to regulate all sewering agencies in Orange County that are within the Santa Ana Regional Board's jurisdiction. It is anticipated that upon implementation of the requirements specified in this order, beach water closures due to SSOs will be significantly reduced/eliminated.

BACKGROUND

During the summer of 1999, a 1 to 5 mile section of Huntington Beach was closed to body contact recreation. As part of the investigation of the possible causes of the beach water pollution, the Executive Officer issued a Cleanup and Abatement Order requiring the City of Huntington Beach to conduct an investigation of its sanitary sewers and to determine the impact of any leaking sewers on the microbial pollution problems in the ocean waters. The Cleanup and Abatement Order also required the City to develop and implement a plan for repairing leaking sewers throughout the City.

The City of Huntington Beach completed the investigation of the sewer system and concluded that the leaking sewers had not contributed to the beach water pollution problems at Huntington Beach, or adversely impacted ground water quality. However, these investigations and other similar studies indicated that sewage leaks and spills from deteriorated sewer lines and/or sewer lines that are not properly maintained could be a significant source of microbial contamination in the nearshore zone of the ocean.

There are 27 sewage collection agencies within the Santa Ana portion of Orange County. Many of these collection systems have had sewage spills that resulted in beach water closures. Table 1 below lists 31 SSOs that resulted in beach water closures, the cause of the spill, and the amount of the spill, the area impacted, and the responsible party. Over 100,000 gallons of sewage (excluding secondary treated wastewater) was spilled into nearshore ocean waters between January 2000 and August 2001. During the same period there were a total of approximately 250 sewage spills. Most of these spills did not result in a beach

water closure; but many of the spills reached other surface water bodies within the Region.

Table 1: Ocean, Bay and Harbor Water Closures January 2000-August 2001 (Monica Mazur, OCHCA August 2001)					
	Date Closed	**Date Opened**	**Ocean, Bay, Harbor Area Closed**	**Agency/Reason (PPO=Private Property Owner)**	**Amount Spilled***
1.	1/2/00	1/5/00	Harbor Patrol Beach, China Cove & Rocky Point Beach, Newport Bay, Newport Beach	City of Newport Beach/Line Blockage	~1500 gallons/sewage
2.	1/4/00	1/6/00	Trinidad Beach and Westchester Docks, Huntington Harbour, Huntington Beach	Westchester Bay-Sea Gate Lagoons (PPO)/Line Blockage	Unknown/sewage
3.	1/7/00	1/11/00	Arches Marina, Newport Bay, Newport Beach	Park Superior Health Care (PPO)/Line Blockage	~240 gallons/sewage
4.	2/22/00	2/28/00	San Gabriel River to 1/2 mile downcoast of the San Gabriel River, Seal Beach	Orange County Sanitation District/Line Blockage-possibly storm water surcharge	~1000-10,000 gallons/ sewage
5.	3/19/00	3/23/00	Seal Beach Pier to Anderson Street, Seal Beach & Mother's Beach, Sunset Aquatic Marina, Peter's Landing Marina and Portofino Marina, Huntington Harbour, Huntington Beach	City of Seal Beach/Line Break	~1500 gallons/sewage
6.	4/24/00	4/27/00	San Gabriel River to 5th Street, Seal Beach	City of Placentia/Line Blockage	~84,000 gallons/sewage 63,000 gallons recovered
7.	5/4/00	5/7/00	Bayshore Beach & Dover Shores Beaches (2 coves), Newport Bay, Newport Beach	City of Newport Beach/Line Blockage	~1000 gallons/sewage ~200 gallons recovered
8.	5/9/00	5/11/00	Talbert Channel to Orange Street, Huntington State Beach & Newport City Beach Huntington Beach & Newport Beach	Orange County Sanitation District/Pump Station Equipment Failure	~5000 gallons/sewage
9.	6/9/00	6/13/00	San Gabriel River mouth downcoast to Seal Beach Pier, Seal Beach	Orange County Sanitation District/Line Blockage	~50,000 gallons/ sewage
10.	9/11/00	9/14/00	From Lido Island Bridge to 300 feet up bay of Lido Island Bridge along Lido Marina Village docks, Newport Bay, Newport Beach	Lido Marina Village/Line Break at Vessel Pump Out Facility	Unknown/sewage
11.	9/20/00	9/22/00	From west end of Balboa Bay Club Marina down bay through Bayshore's "Play Beach" and bay front, Newport Bay, Newport Beach	Balboa Bay Club/Line Blockage - possibly grease	~500-700 gallons/ sewage
12.	11/13/00	11/15/00	Harbor Marina, Newport Bay, Newport Beach	PPO/Line Blockage	~105 gallons/sewage
13.	12/7/00	12/10/00	North Star Beach up bay to Jamboree Road, Newport Bay	Irvine Ranch Water District/Line Break	250,000 gal. secondary

Table 1: Ocean, Bay and Harbor Water Closures January 2000-August 2001 (Monica Mazur, OCHCA August 2001)

	Date Closed	Date Opened	Ocean, Bay, Harbor Area Closed	Agency/Reason	Amount Spilled*
14.	12/11/00	12/14/00	"A" Dock and Harbor Patrol Dock, Sunset Aquatic Marina, Anaheim Bay, Seal Beach	Sunset Aquatic Marina (PPO)/Line Break	~5-10 gallons 2 X/day X ~5months/sewage
15.	12/28/00	12/31/00	North Star Beach, Newport Bay, Newport Beach	City of Newport Beach/Line Blockage	500-600 gallons/ sewage
16.	2/14/01	2/17/01	300 feet up coast and 300 feet downcoast of the Santa Ana River, Huntington State Beach, Huntington Beach & Newport Beach	PPO (Denny's Restaurant)/line blockage (grease & paper towels)	~100-300 gallons / sewage
17.	2/20/01	2/25/01	1000 feet up coast and 1000 feet downcoast of the Santa Ana River, Huntington State Beach, Huntington Beach & Newport Beach	Costa Mesa Sanitary District/line blockage (grease)	~1000 gallons/sewage
18.	2/21/01	2/25/01	Newport Slough, Newport Beach	Orange County Sanitation District/ suspected line break	<500 gallons/sewage
19.	3/12/01	3/15/01	300 feet up bay and 300 feet down bay of the Bahia Corinthian Yacht Club, Newport Bay, Newport Beach	PPO (Newport Medical Building)/line blockage	~1000 gallons spilled - ~700 gallons recovered/ sewage
20.	4/10/01	4/13/01	300 feet up coast and 300 feet downcoast of El Morro Creek, El Morro State Beach, Newport Coast	State Department of Parks and Recreation/line break	~25 gallons/sewage
21.	5/12/01	5/16/01	Portofino Cove and Sunset Aquatic Marina, Huntington Harbour, Huntington Beach	Anaheim Sheraton Hotel/line blockage	~2400 gallons/sewage ~100 gallons recovered
22.	5/18/01	5/21/01	Portofino Cove and Sunset Aquatic Marina, Huntington Harbour, Huntington Beach	Garden Grove SD/line break	~13,000 gallons/sewage ~10,400 gallons
23.	5/29/01	6/1/01	Balboa Bay Club "F'"-"H" Docks & Orange Coast College Crew Docks, Newport Bay, Newport Beach	PPO (Balboa Bay Club)/line break (vessel pump station sewage line)	Unknown gallons/sewage
24.	6/9/01	6/12/01	Portofino Cove and Sunset Aquatic Marina, Huntington Harbour, Huntington Beach	PPO/line blockage (grease)	~1500 gallons/sewage
25.	6/27/01	6/30/01	Balboa Yacht Club docks, Newport Bay, Newport Beach	PPO (Balboa Yacht Club)/line blockage	>200 gallons/sewage
26.	7/3/01	7/5/01	San Gabriel River mouth to 4th Street, Seal Beach	PPO ( )/line blockage	~9800 gallons/sewage ~1600 gallons recovered

Table 1: Ocean, Bay and Harbor Water Closures January 2000-August 2001 (Monica Mazur, OCHCA August 2001)

	Date Closed	Date Opened	Ocean, Bay, Harbor Area Closed	Agency/Reason	Amount Spilled*
27.	8/12/01	8/16/01	Sunset Aquatic Park Marina, Admiralty Drive Channel, Peter's Landing Marina & 11th Street Beach, Huntington Harbour, Huntington Beach	City of Huntington Beach/line break (force main)	~2000 gallons/sewage
28.	8/12/01	8/16/01	Mouth of San Gabriel River to 300 feet downcoast of San Gabriel River, Seal Beach	City of Fullerton/line blockage (grease)	~6000 gallons/sewage
29.	8/23/01	8/26/01	Harbor Patrol Beach, Newport Bay, Newport Beach	Orange County Public Facilities & Resources Department/line break at vessel holding tank pump out facility	<50 gallons/sewage
30.	8/24/01	8/29/01	Crow's Nest Marina, Newport Bay, Newport Beach	PPO (Crow's Nest Marina)/line break at vessel holding tank pump out facility	<50 gallons/sewage
31.	8/30/01		City Channel at Sea Harbor and Coral Cay at Marina Bay Drive, Huntington Harbour, Huntington Beach	PPO (Jewel Land Properties)/line blockage	~500 gallons/sewage

*Amount Spilled: amount spilled - amount recovered = release amount.

CAUSES FOR SEWER SYSTEM OVERFLOWS AND THE EFFECTS OF DISCHARGE OF SEWAGE TO WATERS OF THE STATE

Table 1, above, also shows some of the causes of the reported SSOs. The majority of the SSOs are caused by pipe blockages due to grease buildup, debris, and roots. Other causes include sewer line damage due to flood, manhole structure failures, vandalism, pump station failures, pipe breakage, inadequate capacity, power outages, contractor caused damages, inflow and infiltration, and sewer systems that are not properly designed, constructed, operated, and/or maintained.

COLLECTION SYSTEM EVALUATION CRITERIA

In determining whether a sewage collection system is properly operated and maintained, staff used a report prepared by the American Society of Civil Engineers (ASCE) for USEPA in June 2000 entitled, “Protocols for Identifying Sanitary Sewer Overflows”. This report is based on a survey of 14 sewage collection agencies from across the country to evaluate sewage spills, causes of spills, and operations and maintenance practices. The 14 sewer systems surveyed were chosen because they had a reputation for having good operations and maintenance programs and a relatively low number of sewage spills. The agencies were surveyed to determine what each agency did to prevent sewage spills and to determine how they responded to spills.

Table 2, below, summarizes some of the data collected for the ASCE report including the average and the range for some of the survey parameters. This survey is one example of many studies available to compare sewage collection systems and the systems surveyed may not all represent well operated and maintained systems.

Table 2: Summary of Data Collected by ASCE (June 2000)

Criteria	Average	Maximum	Minimum
Population Density per/sq. mi.	282.3	468.8	176.4
Age of Collection System (%<30 yrs.)	37.3	63	1.0
Average Daily Flow, gcd	170	297	86
% of System >24 in. diameter	10.9	40	0.5
Mile Sewer/Pump Station	84.7	316.7	3.4
% System Industrial/commercial	17.9	80	3
SSO Wet Weather Events			
-Pipe Failures/100 miles of sewer/yr	1.40	8.54	0
-Manhole Overflows/100 miles/yr	2.02	7.46	0
-Basement backups/100 miles/yr	4.76	30.28	0
-Pump Station Failures/100 miles/yr	0.34	1.64	0
-Pump station failures/pump station/yr	0.31	1.63	0
SSO Dry Weather Events			
-Pipe Failures/100 miles/yr	0.88	6.03	0
-Manhole overflows/100 miles/yr	2.14	7.46	0
Basement backups/100 miles/yr	2.3	17.01	0
-Pump station failures/yr	0.5	2.03	0
Routine Maintenance Frequency			
-%cleaned/yr	22.6	38.8	6.4
-%root treated/yr	5.2	34.7	0
-Main stoppages cleared/100 miles/yr	41.4	162.3	0
-Services stoppages cleared/100 miles/	104.3	420.0	0
-Pump Station Service/PS/yr	141.0	443.5	0
-Monitoring sites/100 mi./yr	12.0	62.5	0.4
-% manhole inspected/yr	15.5	48.5	0.1
-Dye test/100 miles/yr	5.9	30.3	0.8
-% CCTV Inspected/yr	0.4	1.9	0.1

As part of an investigation to determine the causes of the sewage spills in Orange County, staff conducted audits of a number of sewage collection agencies within Orange County. Staff evaluated the operations, management, capacity, reporting procedures, spill response procedures, and maintenance records of the sewage collection agencies audited for this purpose. The investigations indicated that there were sewage spills that were not properly reported by some of the sewage collection agencies. These results were then compared to the ASCE criteria.

SEWAGE COLLECTION AGENCIES IN ORANGE COUNTY

The OCSD is the major sewage collection agency in Orange County. The OCSD owns and operates two sewage treatment plants, one in Fountain Valley and the second one in Huntington Beach. Some of the treated water from the OCSD facility is further treated at the Orange County Water District's Water Factory 21 and reinjected to create a seawater intrusion barrier. The remaining treated water from the sewage treatment plants is discharged through an ocean outfall located approximately 4.2 miles from shore at Huntington Beach. The Irvine Ranch Water District (IRWD) operates a sewage treatment plant in Irvine. Other agencies listed below only operate sewage collection systems. Except for El Toro Water District, all other sewage collection systems listed below are tributary to the OCSD system.

Table 3, below, lists each of the sewage collection agencies in Orange County within the Santa Ana Region, and some basic characteristics of each system, such as the population served, service area, miles of sewers, etc. OCSD operates major trunk line sewers throughout each service area that collects sewage from each system for treatment at their two treatment plants. The agencies listed in Table 3 collect approximately 240 million gallons per day of wastewater, from over 2 million people, spread over more than 460 square miles. The size of the sewage collection systems range from a service population of 4,000 to more than 300,000 people, and from less than 3 miles of sewers to more than 500 miles of sewers. The entire sewage collection system includes almost 5,000 miles of sewers, and over 100 pump stations.

Table 3: Sewage Collection Agencies in Orange County within the Santa Ana Region (OCSD, 2000)

City/Sanitation District	Population	Service Area	Gravity Sewers	Force Main	Pump Stations
		Square Miles	Miles	Feet	No.
Anaheim	328,000	49.76	503	0	0
Brea	36,000	23.1	108.5	300	1
Buena Park	78,280	10.29	250	0	0
Costa Mesa S.D.	109,000	15.7	321	24813	20
Cypress	49,600	7.2	87	2000	1
El Toro Water District	N/A	N/A	N/A	N/A	N/A
Fountain Valley	58,000	10	130	100	1
Fullerton	127,000	22	283.5	0	0
Garden Grove	165,196	17.8	327	9150	3
Huntington Beach	201,000	28	580	34320	28
Irvine	See IRWD				
Irvine Ranch W.D.	69728	123	515.05	79279	8
La Habra	58,974	7.5	105.95	0	
La Palma	16400	2	25	0	0
Los Alamitos	See Rossmoor				
Midway City S.D.	90,000	10.25	168		4
Newport Beach	70,000	24	210	106,000	20
Orange	129,000	23	309	600	2
Placentia	46,888	7	23	0	0
Los Alamitos/Rossmoor S.D.	24,780	6.25	54	0	0
Santa Ana	312,595	27	450	100	2
Seal Beach	25,098	10.72	45	19,079	9
Stanton	37,400	3	55	600	1
Sunset Beach S.D.	4,000	0.25	2.67	750	2
Tustin	68,316	12.59	51.52	0	0
Irvine Business Complex			24.18	2,794	3
Villa Park	6,782	2.1	30	250	1
Westminster		See Midway City S.D.			
Yorba Linda	63,000	9.3	72.6	450	1
Yorba Linda W.D.	54,376	11	138	529	1
Total	2,317,620	463	4,869	281,114	108

The OCSD's annual Operations and Maintenance Survey report provides information about the system components, number of sewage spills, money spent on O&M and capital improvement, and other factors. Although these reports provide a fairly good picture of each sewage collection system, there are differences in how each agency responded to the survey questions and differences in operations within each system that may skew any statistical analysis of the data. For example, some agencies report all sewage spills and others only report spills greater than 1,000 gallons. Some agencies do not report

sewage spills at all. Some agencies report budget information as a total amount and others break down costs based on O & M, capital improvement, and pump station maintenance, as requested by the survey. However, the OCSD annual O&M survey results do provide basic information on overall performance of each sewer system and it could be used as a tool to identify areas that need improvement.

Table 4, below, summarizes the information on SSOs from the OCSD annual O&M survey. Only 8 sewage spills greater than 1,000 gallons and 150 SSOs less than 1,000 gallons were reported. The overall results are comparable to the ASCE survey results summarized in Table 2. Again this comparison may not be accurate as some of the collection agencies did not report any of the sewage spills in their jurisdiction

Table 5, below, summarizes the budget information provided by the sewage collection agencies in the OCSD annual O&M survey. As shown in the table, not all agencies provided budget information and audits of a limited number of these agencies by staff indicated that some to the information listed in Table 5 is not accurate. Table 5 shows that the annual budgets for the sewer system ranges from $1.19 to $175 per person per year. The expenditures for operations and maintenance (O & M) and for capital improvement also vary significantly among these agencies. Comparing Table 5 with the number of sewage spills listed in Table 4 for each agency, there appears to be some correlation between the total amount spent per year on O&M and the number of sewage spills. However, due to the inaccuracies in the reporting format, these comparisons may be premature

Table 4: Number of Sanitary Sewer Overflows during 2000 in Orange County (OCSD, 2000) (for Collection Systems Tributary to OCSD)

City/Sanitation District	Sewage Spills <500 gallons	Sewage Spills 500-1000 gal.	Sewage Spills 1,000-10,000 gal.	Sewage Spills >10,000 gal.	No. of Spills per 100 mi.
Anaheim	23	5	3	0	6.16
Brea	1	0	0	0	0.92
Buena Park	0	0	0	0	0.00
Costa Mesa S.D.	14	0	2	0	4.98
Cypress	0	0	0	0	0.00
Fountain Valley	0	0	0	0	0.00
Fullerton	21	13	0	0	11.99
Garden Grove	15	3	1	0	5.81
Huntington Beach	7	3	0	0	1.72
Irvine					
Irvine Ranch W.D.	0	0	0	0	0.00
La Habra	3	0	0	0	2.83
La Palma	0	0	0	0	0.00
Los Alamitos		W			
Midway City S.D.	12	0	0	0	7.14
Newport Beach	List not Provided				
Orange	8	0	0	0	2.59
Placentia	7	0	0	1	34.78
Los Alamitos/Rossmoor S.D.	0	0	0	0	0.00
Santa Ana	9	0	0	0	2.00
Seal Beach	0	0	0	0	0.00
Stanton	4	0	0	0	7.27
Sunset Beach S.D.	0	0	0	0	0.00
Tustin	1	1	0	0	3.88
Irvine Business Complex	0	0	0	0	0.00
Villa Park	0	0	0	0	0.00
Westminster					
Yorba Linda	0	0	0	0	0.00
Yorba Linda W.D.	2	1	1	0	2.90
Total/average	127	26	7	1	3.80

Table 5: Summary of Budget Information for Sewage Collection Systems in Orange County (for systems tributary to OCSD).

City/Sanitation District	Sewer O&M	Pump Station O&M	Capital Improvement	Sewer O&M	Pump Station O&M	Capital Improvement	Sewer O&M
	$/year	$/year	$/year	$/Mile	$/PS	$/Mile	$/Capita/yr.
Anaheim	1845254.00			3668.50		0.00	5.63
Brea	120000.00	10000.00	150000.00	1105.99	10000.00	1382.49	3.33
Buena Park	130000.00	NA	700000.00	520.00		2800.00	1.66
Costa Mesa S.D.	762,790.00	326,910	991,000	2347	16,345	3050.00	6.99
Cypress	136026.00		50000.00	1563.52	0.00	574.71	2.74
Fountain Valley							
Fullerton	285054.00			1005.48		0.00	2.24
Garden Grove	3859062.00		995000.00	11801.41	0.00	3042.81	23.36
Huntington Beach	779645.00	461255.00	1648510.00	1344.22	16473.39	2842.26	3.88
Irvine							
Irvine Ranch W.D.	6004858.00		1343479.00	11658.79	0.00	2608.44	86.12
La Habra	218868.00	0.00	507968.00	2065.77		4794.41	3.71
La Palma	260000.00			10400.00		0.00	15.85
Los Alamitos							
Midway City S.D.							
Newport Beach	212000.00	700000.00	550000.00	1009.52	35000.00	2619.05	3.03
Orange	188700.00			610.68	0.00	0.00	1.46
Placentia	60000.00			2608.70		0.00	1.28
Los Alamitos/Rossmoor	70000.00	0.00	50000.00	1296.30		925.93	2.82
Santa Ana	665855.00		200000.00	1479.68	0.00	444.44	2.13
Seal Beach	351000.00		1182500.00	7800.00	0.00	26277.78	13.99
Stanton	150000.00	10000.00	800000.00	2727.27		14545.45	4.01
Sunset Beach S.D.	700000.00			262172.28	0.00	0.00	175.00
Tustin	113344.00			2200.00		0.00	1.66
Irvine Business Complex	48748.00	56054.00	1354000.00	2016.05	18684.67	55996.69	
Villa Park	12500.00	4200.00	20000.00	416.67	4200.00	666.67	1.84
Westminster							0.00
Yorba Linda	119300.00	12000.00	0.00	1643.25	12000.00	0.00	1.89
Yorba Linda W.D.	64720.00		181135.00	468.99	0.00	1312.57	1.19

NEED FOR GENERAL WASTE DISCHARGE REQUIREMENTS

SSOs may cause a nuisance, cause temporary exceedances of applicable water quality standards, pose a threat to the public health, adversely affect aquatic life, and impair the public recreational use and aesthetic enjoyment of surface waters. As discussed above, most of these SSOs are preventable with proper operation and maintenance of the collection systems. Regional Board staff's audit of a number of sewage collection agencies and the information in Tables 4 and 5, above, indicate that the sewage collection agencies' operation, maintenance, spill reporting procedures, and response to spills vary widely. In certain cases, significant improvements are needed to minimize these SSOs and their adverse impacts. The proposed General Waste Discharge Requirements (WDR) prescribes uniform minimum standards for the sewage collection agencies. By issuing a General WDR to all the collection agencies in Orange County, the requirements are uniformly applied without the administrative burden of issuing individual permits.

Sanitary sewer overflows that discharge to surface waters have been prohibited under the Clean Water Act since 1972. Municipal wastewater treatment plants that discharge are currently required to comply with National Pollutant Discharge Elimination System (NPDES) permits, which require record-keeping and reporting of overflows and maintenance of their collection system. Most satellite sewage collection systems do not current have NPDES permits. Satellite municipal collection systems are those collection systems where the owner or operator is different than the owner or operator of the treatment facility.

REGULATORY BASIS

The Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) prohibits the discharge of untreated sewage to any surface water stream, natural or man-made, or to any drainage system intended to convey storm water runoff to surface water streams (Basin Plan, Chapter 5, Implementation, Page 5-5). The California Water Code (Section 13260) and the Clean Water Act (Section 402) prohibits the discharge of pollutants to surface waters without an NPDES permit. This order implements the Basin Plan prohibition (no discharge to surface waters) and therefore, is not an NPDES permit. The Basin Plan prohibition is the basis for the requirements specified in this order.

REQUIREMENTS

The order requires the sewage collection agencies to develop and implement a Sewer System Management Plan (SSMP). The SSMP should include programs and policies the agency is proposing to address capacity, management, operation, maintenance, funding, and spill response. Since grease blockage has been identified as one of the major causes of SSOs, the sewage collection

agencies are also required to implement a grease and fat source control program.

RECOMMENDATION

Staff recommends adoption of Order No. R8-2002-0014 as presented.

Attachments:

A. Tentative Order, and Monitoring and Reporting Program, No. R8-2002-0014
B. Response to Comments

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

ORDER NO. R8-2002-0014 (April 10, 2002 Draft)

GENERAL WASTE DISCHARGE REQUIREMENTS

FOR SEWAGE COLLECTION AGENCIES IN ORANGE COUNTY WITHIN THE SANTA ANA REGION

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), finds that:

1. The following federal agencies, municipalities, counties, districts or other public bodies, which own or have responsibilities for sanitary sewer collection systems or any facilities that collect or convey untreated sewage wastewater in the portions of Orange County within the Santa Ana Region, are named as dischargers (or permittees) in this Order. Since most of these dischargers are tributary to the Orange County Sanitation District (OCSD), the OCSD may lead a steering committee for all other entities tributary to OCSD, to facilitate compliance by each discharger with the requirements of this Order.

City of Anaheim	City of Newport Beach
City of Brea	City of Orange
City of Buena Park	City of Placentia
Costa Mesa Sanitary District	Rossmoor/Los Alamitos Area Sewer District
City of Cypress	City of Santa Ana
City of Fountain Valley	City of Seal Beach
City of Fullerton	City of Stanton
Garden Grove Sanitary District	Sunset Beach Sanitary District
City of Huntington Beach	County of Orange Unincorporated Area 7
City of La Palma	City of Villa Park

Irvine Ranch Water District	City of Yorba Linda
City of La Habra	Yorba Linda Water District
Orange County Sanitation District (OCSD)	Midway City Sanitation District
City of Los Alamitos	El Toro Water District
U.S. Air Force Reserve Center Los Alamitos	Joint Forces Training Base Los Alamitos
Marine Corps Air Station El Toro/Tustin	Naval Weapons Station Seal Beach

2. A sanitary sewer system is a sewage wastewater collection system including sewers, pipes, pumps, or other conveyances that convey sewage wastewater (e.g. domestic, commercial, and industrial wastewaters) to a sewage treatment plant. This order prohibits the discharge of sewage from collection systems that result in a discharge of sewage to surface waters of the State. A sanitary sewer system overflow (SSO), or sewage spill, is each instance of a discharge of sewage from a sanitary sewer system. If these discharges of sewage from any sewage spill or SSO are not fully contained and cleaned up, and there is a discharge of sewage to surface waters of the State, or the SSO causes a nuisance, it is a violation of this order, Sections 13260 and 13376 of the California Water Code, and Section 301 of the Clean Water Act. The discharges of sewage from a sanitary sewer system, that are fully contained above ground, and do not create a nuisance or result in a discharge of sewage to waters of the State, are not subject to the Prohibition A.1 of this order. Sewage discharged from a collection system that result in a discharge of sewage to an enclosed storm drain pipe, and not discharged to surface waters, are not considered discharges to surface waters in terms of this order, except that these sewage discharges shall be reported in the same manner as a sewage discharged to surface waters and the discharger is required to demonstrate that the sewage was not discharged from the storm drain to surface waters. Sewage discharged to open drainage channels, whether natural, man made, or concrete lined, are considered to be discharges of sewage to surface waters of the State. The order also requires the discharger to develop and implement a plan to address subsurface discharges of sewage to ground waters of the State. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, highlines, etc.) are considered to be part of the sanitary sewer system, and discharges of sewage to

these facilities are not sanitary sewer overflows, provided that sewage from these facilities is not discharged to waters of the State.

3. Sanitary sewer overflows (SSOs) consist of varying mixtures of domestic sewage, and industrial and commercial wastewater depending on the pattern of land uses in the sewage collection system tributary area. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen demanding organic compounds, oil and grease and other pollutants. SSOs may cause a nuisance, cause temporary exceedances of applicable water quality standards when the sewage is discharged to surface waters of the State, pose a threat to the public health, adversely affect aquatic life, and impair the public recreational use and aesthetic enjoyment of surface waters. Section 13050(m) of the California Water Code defines a nuisance as anything that meets the following requirements: (1) Is injurious to health, or is indecent to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. (3) Occurs during, or as the result of, the treatment or disposal of waste.

4. SSOs are a frequent occurrence in the portions of Orange County within the Santa Ana Region. The chief causes of sanitary sewer overflows include grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, storm or ground water inflow/infiltration, debris blockages, collection system age and construction material failures, lack of proper operation and maintenance, lack of capacity and contractor caused damages. Most of these SSOs are preventable with adequate and appropriate source control measures and operation and maintenance of the sewage collection system.

5. In Orange County, from January 1, 2000 through August 30, 2001, there were approximately 250 SSOs. SSOs from publicly owned sewage collection systems accounted for almost 75% of these sewage spills, with the remainder occurring on private property. On 31 occasions during this time period, beach waters were closed to body contact recreation resulting in a loss of 16.5 beach mile days (beach mile days = miles of beach X number of days of closure) of beneficial uses. Seventeen of these beach water closures were caused by sewage spills from systems owned by public agencies, and the other 14 closures resulted from sewage spills on private property that were not contained and resulted in a discharge to waters of the State. Areas where beach water was closed to body contact recreation include portions of Seal Beach, Sunset Beach, Huntington Beach, Newport Beach, Crystal Cove State Park, Newport Bay, and Huntington Harbor. Many of these SSOs that caused beach water closures also caused

violations of water quality standards in other surface water bodies, such as the San Gabriel River, Coyote Creek, San Diego Creek and other surface water bodies in Orange County.

6. The beach water closures occur when sewage is present (closures), and warnings are posted when any water quality standard is exceeded (postings). In addition to SSOs, urban runoff and storm water generally contain elevated levels of bacteria. Therefore, warning signs are posted at storm drain outlets to the ocean during storm events along the beach and a rainfall advisory is issued for all storms. During the January 1, 2000 through August 30, 2001 period, the Orange County Health Care Agency (OCHCA) also posted many of the same beach areas warning the public that concentrations of indicator bacteria at one of OCHCA's monitoring stations exceeded the State health standards. The OCHCA has posted notices of exceedances of water quality objectives that has resulted in 99.4 beach mile days of violations of water quality standards during January through August 2001.

7. A revised "Water Quality Control Plan for the Santa Ana River Basin (8)" (hereinafter Basin Plan) became effective on January 24, 1995. The Basin Plan designates beneficial uses, narrative and numerical water quality objectives, and prohibits certain types of discharges. The Basin Plan establishes body contact recreation as a beneficial use of the Pacific Ocean and other surface water bodies within Orange County, including Serrano Creek, San Diego Creek, Bonita Creek, Santa Ana Delhi Channel, the Santa Ana River, Talbert Marsh, Newport Bay, Huntington Harbour, and Newport Slough. The Basin Plan also includes a numeric water quality objective for coliform to protect and maintain this beneficial use. This objective is specified as a 30-day geometric mean of no more than 200 MPN/100 ml of fecal coliform. The Basin Plan also includes, by reference, the California Ocean Plan standards for ocean waters in the Region.

8. The Basin Plan contains the following prohibition:

   "The discharge of untreated sewage to any surface water stream, natural or man-made, or to any drainage system intended to convey storm water runoff to surface water streams, is prohibited."

9. California Water Code Section 13243 provides that a Regional Board, in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, is not permitted. The requirements specified in this order are consistent with the Basin Plan prohibition and Water Code Section 13243.

10. The issuance of a single general waste discharge requirement to the dischargers will:

    a) Reduce the administrative burden of issuing individual waste discharge requirements to each discharger; and

    b) Provide for a unified regional approach for the reporting and database tracking of sanitary sewer overflows.

    c) Provide consistent and uniform standards of performance, operations, and maintenance of sewage collection systems.

    d) Provide statewide consistency in reporting as per Assembly Bill (AB) 285 (adopted on October 4, 2001) and the State Water Resources Control Board's reporting requirements per AB 285.

    e) Facilitate uniform enforcement for violations. (The State Water Resources Control Board, Office of the Chief Counsel, issued a questions and answers paper on April 17, 2001 stating that SSOs are not subject to minimum mandatory penalties." However, the California Water Code provides for penalties for unauthorized discharges.)

11. This project involves a prohibition of discharge, and as such, is exempt from the provisions of the California Environmental Quality Act, in accordance with Title 14, California Code of Regulations, Chapter 3, Section 15308.

12. The Regional Board has notified the dischargers and all known interested parties of the intent to prescribe waste discharge requirements to prohibit unauthorized discharges from sanitary sewer systems.

13. The Regional Board has, at a public meeting on April 26, 2002 heard and considered all comments pertaining to the terms and conditions of this Order.

IT IS HEREBY ORDERED, that the dischargers, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

1. The discharge of untreated sewage to any surface water stream, natural or man-made, or to any drainage system intended to convey storm water runoff to surface water streams, is prohibited.

2. The discharge of chlorine, or any other toxic substance used for disinfection and cleanup of sewage spills, to any surface water body is prohibited. (This prohibition does not apply to the chlorine in the potable water used for final wash down and clean up of sewage spills.)

B. IMPLEMENTATION AND ENFORCEMENT OF PROHIBITION A.1

1. In any enforcement action the Regional Board will consider the efforts of the discharger to contain, control, and clean up sewage spills from its collection system as part of its consideration of the factors required by Section 13327 of the California Water Code. The discharger shall make every effort to contain sewage spilled from their collection systems and prevent the sewage from entering storm drains and surface water bodies. The discharger shall also make every effort to prevent sewage from discharging from storm drains into flood control channels and open ditches by blocking the storm drainage system and by removing the sewage from the storm drains. The use of the storm drain pipe system to contain the sewage by blocking the drain pipes, and recovering and cleaning up the spilled sewage, in order to prevent the sewage from being discharged to a surface water body, is not a violation of Prohibition A.1.

C. PROVISIONS

1. The discharger must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action.

2. Discharges Caused by Severe Natural Conditions – The Regional Board may take enforcement action against the permittee for any sanitary sewer system discharge caused by natural conditions, unless the permittee demonstrates through properly signed, contemporaneous operating logs, or other relevant evidence that:

   (i) the discharge was caused by severe natural conditions (such as hurricanes, tornadoes, flooding, earthquakes, tsunamis, and other similar natural conditions);

   (ii) there were no feasible alternatives to the discharge, such as retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, or an increase in the capacity of the system. This provision is not satisfied if, in the exercise of reasonable engineering judgment, at the time that the facilities were planned, the discharger should have installed auxiliary or additional collection system components, wastewater retention, adequate back-up equipment or should have reduced inflow and infiltration. This provision is

also not satisfied if the agency does not undergo a periodic or continuing planning process to identify and correct problems.

3. Discharges Caused by Other Factors - For SSOs other than those covered under this section, the permittee may establish an affirmative defense to an action brought for noncompliance if the permittee demonstrates through properly signed, contemporaneous operating logs, or other relevant evidence that:

   (i) the permittee can identify the cause or likely cause of the discharge event;

   (ii) the discharge was exceptional, unintentional, temporary and caused by factors beyond the reasonable control of the permittee;

   (iii) the discharge could not have been prevented by the exercise of reasonable control, such as proper management, operation and maintenance; adequate treatment facilities at OCSD's two regional treatment plants or collection system facilities or components (e.g., adequately enlarging treatment or collection facilities to accommodate growth or adequately controlling and preventing infiltration and inflow); preventive maintenance; or installation of adequate backup equipment; and

   (iv) the permittee took all reasonable steps to stop, and mitigate the impact of, the discharge as soon as possible.

4. Burden of proof - In any enforcement proceeding, the permittee has the burden of proof to establish that the criteria in this section have been met.

5. In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order.

6. Upon reduction, loss, or failure of the sanitary sewer system resulting in a sanitary sewer overflow, the discharger shall, to the extent necessary to maintain compliance with this Order, take any necessary remedial action to 1) control or limit the volume of sewage discharged, 2) terminate the sewage discharge as rapidly as possible, and 3) recover as much of the sewage discharged as possible for proper disposal, including any wash down water. The dischargers shall implement all remedial actions to the extent they may be applicable to the discharge, including the following:

   a. Interception and rerouting of sewage flows around the sewage line failure;

b. Vacuum truck recovery of sanitary sewer overflows and wash down water;

c. Cleanup of debris of sewage origin at the overflow site.

7. The discharger shall properly fund, manage, operate and maintain, with adequately trained staff and/or contractors possessing adequate knowledge skills and abilities as demonstrated through a validated program at all times, all parts of the sewage collection system owned and/or operated by the discharger.

8. The discharger shall provide adequate capacity to convey base flows and peak flows, including wet weather related events to the minimum design criteria as defined in the discharger's System Evaluation and Capacity Assurance Plan, for all parts of the collection system owned or operated by the discharger.

9. The discharger shall take all feasible steps to stop, and mitigate the impact of, sanitary sewer overflows in portions of the collection system owned or operated by the discharger.

10. The discharger shall provide notification to the OCHCA and the Regional Board so that they can notify parties with a reasonable potential for exposure to pollutants associated with the SSO.

11. The discharger shall develop and implement a written plan, a Sewer System Management Plan (SSMP), for compliance with these waste discharge requirements and make it available to any member of the public upon request in writing.

12. The essential elements of the SSMP are specified below. If the discharger believes that any element of this section is not appropriate or applicable for their SSMP program, the program does not need to address it, but the SSMP must explain why that element is not applicable. The Regional Board will consider the quality of the SSMP, its implementation and effectiveness in any relevant enforcement action, including, but not limited to, any enforcement action for violation of the Clean Water Act, the Basin Plan prohibition, or these waste discharge requirements. The SSMP must include the following components, with the exception of non-applicable components, as discussed above:

Sewer System Management Plan (SSMP)

(i) **Goals**: The main goal of the SSMP is to prevent SSOs and to provide a plan and schedule for measures to be implemented to prevent SSOs.

(ii) **Organization**: The SSMP must identify:

(A) Administrative and maintenance positions responsible for implementing measures in the SSMP program, including lines of authority by organization chart or similar document; and

(B) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the Regional Water Quality Control Board, Orange County Health Care Agency, and State Office of Emergency Services (OES); reporting to the OES is required if the discharge is 1,000 gallons or larger.

(iii) **Legal Authority:** The SSMP shall include legal authority, through sewer use ordinances, service agreements or other legally binding procedures, to:

(A) Control infiltration and connections from inflow sources, including satellite systems;

(B) Require that sewers and connections be properly designed and constructed;

(C) Ensure proper installation, testing, and inspection of new and rehabilitated sewers (such as new or rehabilitated collector sewers and new or rehabilitated service laterals);

(D) Limit fats and greases and other debris that may cause blockages in the sewage collection system.

(E) Implement the general and specific prohibitions of the national pretreatment program under 40 CFR 403.5.

(iv) **Measures and Activities**. In order to provide an adequate and appropriate SSO reduction plan, the SSMP must address the elements listed below that are appropriate and applicable to the discharger's system and identify the person or position in the organization responsible for each element:

(A) Provide adequate operation and maintenance of facilities and equipment;

(B) Maintain an up-to-date map of the collection system showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and stormwater conveyance facilities;

(C) Maintain relevant information to establish and prioritize appropriate SSMP activities (such as the immediate elimination of dry weather overflows or

overflows into sensitive waters, such as public drinking water supplies and their source waters, swimming beaches and waters where swimming occurs, shellfish beds, designated Outstanding National Resource Waters or Areas of Special Biological Significance, National Marine Sanctuaries, waters within Federal, State, or local parks, and water containing threatened or endangered species or their habitat), and identify and illustrate trends in overflows, such as frequency and volume;

(D) Routine preventive operation and maintenance activities by staff and contractors; including a system for scheduling regular maintenance and cleaning of the collection system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system of tracking work orders and assessing the success of the PM program.

(E) Establish a program to assess the current capacity of the collection system owned by the discharger or where the discharger has operational control; including diversions of urban runoff to the sewer system during dry weather periods and control of infiltration and intrusion during both wet weather events and dry weather periods;

(F) Identify and prioritize structural deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. This shall include a rehabilitation plan including schedules for the entire system. As with the PM program, sewer rehabilitation and replacement is crucial for the prevention of spills. Among the provisions that should be specified in this section is the need to direct rehabilitation and replacement at sewer pipes which are at risk of collapse or prone to more frequent blockages due to pipe defects. The program should also include regular visual and TV inspection of sewer pipes and a system for assessing and ranking the condition of sewer pipes. Finally, the rehabilitation and replacement plan should include a financial plan that properly manages and protects the infrastructure assets.

(G) Provide training on a regular basis for staff in collection system operations, maintenance, and monitoring and determine if contractors' staffs are appropriately trained;

(H) Provide equipment and replacement parts inventories, including identification of critical replacement parts.

(I) Establish an implementation plan and schedule for a public education outreach program that promotes proper disposal of grease and fats.

(J) In accordance with the County of Orange's Drainage Area Management Plan, establish a plan for responding to SSOs from private property that discharge to public right of ways and storm drains, to prevent discharges from SSOs to surface waters and storm drains; and

(K) Develop a plan and a schedule for providing an analysis of alternative methods of disposal for grease and fats, and an implementation plan and a schedule for providing adequate disposal capacity for grease and fats generated within the sewer system service area. This plan shall include an evaluation of the feasibility of using sludge digesters at the OCSD treatment plant for grease disposal and treatment, recycling, rendering, and other disposal alternatives.

(v) **Design and Performance Provisions**:

(A) Develop design and construction standards and specifications for the installation of new sewer systems, pump stations and other appurtenances; and for rehabilitation and repair of existing sewer systems; and

(B) Develop procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

(vi) **Monitoring, Measurement and Program Modifications**

(A) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;

(B) Update program elements, as appropriate, based on monitoring or performance evaluations; and

(C) Modify the SSMP program, as appropriate, to keep it updated and accurate and available for audit at all times.

(vii) **Overflow Emergency Response Plan -** The dischargers shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan should include the following:

(A) Ensure proper notification procedures so that the primary responders are informed of all SSOs in a timely manner (to the greatest extent possible);

(B) Ensure that all overflows (including those that do not discharge to waters of the State) are appropriately responded to, including ensuring that reports of

overflows are immediately dispatched to appropriate personnel for investigation and appropriate response;

(C) Ensure immediate notification of health agencies and other impacted entities (e.g., water suppliers) of all overflows. Report all SSOs to the Regional Water Quality Control Board and the Orange County Health Care Agency, and report to the State OES, if the overflow is 1,000 gallons or larger. The SSMP should identify the public health agency and other officials who will receive immediate notification;

(D) Ensure that appropriate staff and contractor personnel are aware of and follow the plan and are appropriately trained;

(E) Provide emergency operations, such as traffic and crowd control and other necessary emergency response;

(F) Take all reasonable steps to contain sewage and prevent sewage discharges to surface waters and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge;

(G) Develop and implement a plan for the use of portable aerators where complete recovery of the sanitary sewer overflows is not practicable and where severe oxygen depletion in existing surface waters is expected; and

(H) Develop and implement a plan to respond in a timely manner to spills and other emergencies. Collection system staff should be able to respond to a sewage spill in less than an hour from the first call. The system should be capable of meeting this response time day or night, every day of the week. The system must own or have ready access to spill and emergency response equipment such as vacuum trucks, hydroflushers, pumps, temporary bypass hoses, and portable generators.

(viii) **Fats, Oils, and Grease Control Program:** Prepare and implement a grease, fat, and oil source control program to reduce the amount of these substances discharged to the sewer collection system. This plan shall include the legal authority to prohibit discharges to the system and identify measures to prevent SSOs caused by fats, oils, and grease blockages of sewers. The elements of an effective grease control program may include requirements to install grease removal devices (such as traps or, preferably, interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements. An effective grease

control program must also include authority to inspect grease producing facilities, enforcement authorities, and sufficient staff to inspect and enforce the grease ordinance.

(A) The grease control program shall identify sections of the sewer system subject to grease blockages and establish a cleaning maintenance schedule for each section; and

(B) The program shall develop and implement source control measures, for all sources of grease and fats discharged to the sewer system, for each section identified in (A) above.

(ix) **System Evaluation and Capacity Assurance Plan**: Prepare and implement a capital improvement plan that will provide hydraulic capacity of key sewer system elements under peak flow conditions. At a minimum, the plan must include:

(A) Evaluation: Steps to evaluate those portions of the collection system which are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

(B) Capacity Enhancement Measures: Establish a short- and long-term capital improvement program to address identified hydraulic deficiencies including prioritization, alternatives analysis, and schedules; and

(C) Plan updates: The plan must be updated, at a minimum annually, to describe any significant change in proposed actions and/or implementation schedules. The updates should include available information on the performance of measures that have been implemented.

(x) **SSMP Program Audits** - As part of the SSMP, the permittee shall conduct an internal audit, appropriate to the size of the system and the number of overflows, and submit a report of such audit, evaluating the SSMP and its compliance with this subsection, including its deficiencies and steps to correct them.

(xi) **Communications**: - The discharger should communicate on a regular basis with interested parties on the implementation and performance of its SSMP. The communication system should allow interested parties to provide input to the discharger as the program is developed and implemented.

13. The discharger shall develop and implement the SSMP according to the following schedule.

Sewer System Management Plan Time Schedule

Task	Completion Date
Monitoring and Reporting Program No. R8-2002-0014	Effective on Adoption
SSMP Development Plan and Schedule	September 30, 2002
SSO Emergency Response Plan	January 1, 2003
Preventative Maintenance Program	June 15, 2003
Legal Authority	July 30, 2004
Grease Disposal Alternatives	December 30, 2004
Grease Control Program	December 30, 2004
Capacity Evaluation	July 30, 2005
Sewer Rehabilitation Plan for Entire System	September 30, 2005
Final SSMP	September 30, 2005

C. PERMIT AVAILABILITY

1. A copy of this Order shall be maintained at appropriate locations and shall be available to sanitary sewer system operating and maintenance personnel at all times.

D. ENTRY AND INSPECTION

1. The discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

    a. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;

    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

    d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

E. GENERAL MONITORING AND REPORTING REQUIREMENTS

1. The discharger shall furnish to the Executive Officer, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Executive Officer, upon request, copies of records required to be kept by this Order.

2. Pursuant to California Water Code Section 13267(b), the discharger shall comply with the attached Monitoring and Reporting Program No.R8-2002-0014 and future revisions thereto, as specified by the Executive Officer. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. R8-2002-0014.

3. Any person who, without regard to intent or negligence, causes or permits any sewage or other waste to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the local health officer and the Regional Board of the discharge. Discharges of sewage to storm drains and drainage channels, whether man made or natural or concrete lined, shall be reported as required above. All SSOs greater than 1,000 gallons shall also be reported to the Office of Emergency Services. The discharger shall propose, as part of it’s SSMP, a

plan and schedule for reporting and evaluating subsurface discharges of sewage from it's sewage collection system.

F. CHANGE IN OWNERSHIP

1. This Order is not transferable to any person, except after notice to the Executive Officer. The discharger shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the existing discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on.

G. INCOMPLETE REPORTS

1. Where the discharger becomes aware that it failed to submit to the Regional Board any relevant facts in any report required under this Order, it shall promptly submit such facts or information.

H. REPORT DECLARATION

1. All applications, reports, or information (except for 24 hour Sanitary Sewer Overflow Reports) submitted to the Executive Officer shall be signed and certified as follows:

    a. All reports, including disks, (except for preliminary Sanitary Sewer Overflow Reports submitted as soon as possible) required by this Order and other information required by the Executive Officer shall be signed and certified by a person designated, for a municipality, state, federal or other public agency, by either a principal executive officer or ranking elected official, or by a duly authorized representative of that person, as described in paragraph b. of this provision.

    b. An individual is a duly authorized representative only if:

        (1) The authorization is made in writing by a person described in paragraph a. of this provision;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and

(3) The written authorization is submitted to the Executive Officer.

c. Any person signing a document under this provision shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

I. REGIONAL BOARD ADDRESS

1. The discharger shall submit reports required under this Order, or other information required by the Executive Officer, to:

Executive Officer
Santa Ana Regional Board
3737 Main Street, Suite 500
Riverside, CA 92501-3348
Phone No.(909-) 782-4130
Fax No.(909) 781-6288

J. CIVIL MONETARY REMEDIES FOR DISCHARGE VIOLATIONS

1. The California Water Code provides that any person who violates this Order is subject to civil monetary remedies.

2. The California Water Code also provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the technical or monitoring reports is also subject to civil monetary penalties.

K. SEVERABILITY

1. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

2. This order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from liability under federal, state or local laws, nor create a vested right for the discharger to continue the waste discharge.

L. ORDER

1. This order becomes effective on the date of adoption by the Regional Board.

I, Gerard J. Thibeault, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on April 26, 2002.

_____

Gerard J. Thibeault
Executive Officer

Response to Comments on Tentative Order No. R8-2002-0014 (previously 01-99), General Waste Discharge Requirements for Sewage Collection Agencies in Orange County within the Santa Ana Region

1.0 United States Environmental Protection Agency

1. Comment:

Introduction of the staff report, page 1, 4th paragraph, 2nd sentence: Clarify that currently, sanitary sewage overflows (SSOs) are prohibited by the Basin Plan. SSOs also violate section 301(a) of the Clean Water Act which prohibits discharges without a valid NPDES permit.

Response:

Please see changes to this section (Introduction) and also Page 14 of the Staff Report, Regulatory Basis.

2. Comment:

Collection System Evaluation Criteria, pages 7 – 8 of the staff report: I caution the Board against using a single report as a yard stick for evaluating the adequacy of collection system operations and maintenance programs. The true measure of system performance is compliance with the Basin Plan and the Clean Water Act, both of which prohibit SSOs to waters of the US. The other measure of an O & M program is the success at eliminating preventable spills. For this evaluation, the Board can draw from a multitude of technical documents describing good engineering and fiscal practices for wastewater collection. Just to name a few, EPA, the Water Environment Federation, and Cal State Sacramento have each published several useful technical documents. Finally, I want to caution against reliance on benchmark studies such as the ASCE study cited in the staff report. The ASCE study examined only 12 systems which is a tiny fraction of the collection systems operating in our country. Despite the assertions of the ASCE authors, we don't agree that the surveyed systems are leaders in the field of collection system O & M. In fact, some of these systems have known O & M deficiencies and many have spill rates considerably worse than the norm in Southern California.

Response:

Staff agrees that the true measure of sewer system performance is compliance with the existing Basin Plan prohibition, the California Water Code, and the Clean Water Act, which all prohibit discharges of sewage to surface water bodies. Staff cited the collection system evaluation criteria from the American Society of Civil Engineers, as one example of information about the performance of sewage collections systems, and is willing to consider any relevant source of information

that can help assess the effectiveness, performance, and maintenance of sewage collection systems.

It is important to note that some of the sewage collection agencies proposed to be covered by the WDRs already have in place most of the components of the Sewer System Management Plan and some of the other agencies far behind. It is this fact that leads staff to recommend that all the collections systems be held to the same standards of operations and maintenance, in order to prevent sewage spills and keep sewage from discharging to waters of the State.

Some clarifications have been added to the Staff Report.

3. Comment:

Table 4, page 12: Please check the dates covered by the OCSD survey. I believe they reported spills for the fiscal year '99/'00 rather than calendar year 2000.

Response:

The comment is correct. The reported spills are for the 1999-2000 fiscal year and not the calendar year of 2000. The date of the report is as cited.

4. Comment:

Regulatory Basis, page 16: The Board has the authority to issue this order as an NPDES permit. NPDES permits may prohibit discharges of untreated wastewater from collection systems. See additional details below.

Response:

See response to Comment No. 5, below.

5. Comment:

Adopt the Order as an NPDES Permit: EPA urges the Board to adopt this order as an NPDES permit. The authority of this important order will be strengthened if adopted both under California law as well as the federal Clean Water Act. EPA has a good deal of experience with wastewater collection systems and we are presently assisting Board staff by providing technical assistance in their evaluation of collection systems. If the tentative order is adopted as an NPDES permit, EPA will be able to continue working cooperatively with the Board in support of your efforts to ensure compliance with the new permit.

EPA and delegated states have authority to issue NPDES permits to discharging Publically Owned Treatment Works. By definition, collection systems are part of the Publicly Owned Treatment Works. POTW permits should specify the permitted discharge point, impose effluent limits and require proper operation and maintenance. The POTW permit may also prohibit discharges (such as SSOs) from anywhere other than the authorized discharge point, typically the sewage treatment plant outfall. Because every part of the collection system is part of the POTW, EPA and delegated states may impose NPDES permit conditions on regional and satellite collection systems (all contributors to the eventual discharge of treated wastewater from the sewage treatment plant). It is only fair that the collection system permit conditions apply directly to the entity that produces the wastewater. This is exactly what the Board has done with the Tentative Order. NPDES permits can prohibit discharges from the collection system (SSOs) because 1) SSOs occur at locations other than the authorized discharge point, and 2) SSOs are indicative of improper O&M.

An alternative but consistent argument is that the Clean Water Act and associated Federal Regulations (40 CFR 122.21(a)) provide the legal authority for the Board to adopt this order as an NPDES permit. A collection system operator that has spilled sewage that reaches waters of the US (and is likely to do so again) has a duty to apply for an NPDES permit under 40 CFR 122.21(a). The operator is "a person who discharges pollutants." This is true, even if the collection system operator does not otherwise have an NPDES permit, as would be the case for a satellite system that sends its sewage to a regional system owned and operated by another entity. The spills to waters is enough of a nexus to bring them into the universe of entities that should be within the NPDES universe. The NPDES permit for the SSOs should, of course, be no discharge permits as raw sewage discharges fail to meet either secondary treatment/technology based requirements or WQS. The permits further can and appropriately should include requirements related to proper O&M designed to avoid spills, as we typically require proper O&M as a permit condition.

Response:

Staff agrees that the proposed WDR could also be adopted as an NPDES permit. However, as several commenters have noted, the USEPA is in the process of promulgating regulations very similar to the requirements of the proposed WDR. In fact, staff based the requirements in the WDR largely on the latest version of USEPA's proposed Capacity Management, Operations and Maintenance (CMOM) regulations. A number of commenters have also requested that the Regional Board not adopt the proposed WDR, until USEPA has adopted its CMOM regulations, and to work with USEPA and other agencies to ensure consistency between the proposed WDRs and USEPA's CMOM regulations.

Response:

The proposed WDRs are consistent with the latest version of USEPA's CMOM regulations. However, since USEPA is likely to make changes to its proposed CMOM rule, staff believes that it is better to issue this order as WDRs. Staff proposed the WDRs for two main reasons: 1) to regulate sewage collection agencies so as to minimize the discharge of sewage in violation of the prohibitions in the Basin Plan, California Water Code and the Clean Water Act; and 2) to implement the recommendations of the Beach Water Quality Workgroup, chaired by the SWRCB. This workgroup recommended that all sewage collection agencies in Southern California implement a CMOM type program to prevent sewage spills that are a major cause of beach water closures. These WDRs are consistent with those recommendations.

Once USEPA has promulgated its CMOM regulations, the WDRs will be revised and reissued as a NPDES permit.

6. Comment:

Expand the geographic applicability of the Order to all collection systems in the Santa Ana Region: As presently drafted, the tentative order applies only to the Orange County portion of the Santa Ana Region. EPA encourages the Board to expand coverage to all wastewater collection systems in the Santa Ana Region. Region-wide coverage would provide equitable treatment for all systems in the Santa Ana Region, afford protection of inland waters and public health, and extend the likely infrastructure improvements throughout the Santa Ana Region.

Response:

Staff agrees, and plans to prepare similar General WDRs for the other sewage collection agencies in the Region. However, due to the threat to beach water quality from the Orange County sewage collection agencies, staff is dedicating resources to this immediate threat to water quality.

7. Comment:

A.1. Prohibitions, Page 4: As presently drafted, the tentative order prohibits only spills to surface water streams or tributary storm water drainage systems. EPA urges the Board to prohibit all SSOs. Other California Regional Boards have found authority to prohibit all SSOs. All SSOs create a potential risk of harming human health. Since the order requires systems to be properly operated and maintained, it could, by extension, prohibit SSOs as an indicator of poor operations and maintenance.

Response:

Staff does not believe that all SSOs pose a threat to public health and the environment. As USEPA says in this comment, there is some risk from every sewage spill. However, actions can be taken, and are taken by responsible agencies, to quickly respond to sewage spills, prevent spills from discharging to surface water bodies, cleanup spilled sewage and water that is contaminated with sewage, and protect public health.

The proposed WDRs, in the monitoring and reporting program, require that all spills be reported to Board staff, and the Orange County Health Care Agency (OCHCA) also requires such reporting. This requirement for each agency to report all SSOs will provide information that will be considered as an indicator of performance, as stated in Provision No. 12 of the proposed order.

The WDRs implement the existing Basin Plan prohibition and believes that the recommended approach to enforcing the existing Basin Plan prohibition is sufficient to protect beneficial uses of the waters of the state, and notes that changing the prohibition as suggested may require an amendment of the Basin Plan prohibition.

8. Comment:

B. 12. (iii) Legal Authority, page 6: Add a subpart requiring that, where appropriate, the collection system should have authority to address flows from satellite collection systems. The order applies to OCSD and they, of course, have many satellite systems discharging to their regional system. The suggested provision does not suggest that the regional system take responsibility for the satellite systems. Rather, they need to have some authority to address the flows that are discharged into their regional system by the satellites. This provision may also apply to other cities and districts under this order if they happen to have smaller satellite systems discharging to their collection system.

Response:

WDRs changed to address flows from satellite systems.

9. Comment:

B. 12. (iv) (D) Preventive Maintenance Program, page 7: Expand this subpart to more fully specify what is expected in this section of the SSMP. The preventive maintenance portion of the SSMP is crucial for the prevention of spills. Specify that the preventive maintenance (PM) program should include a system for scheduling regular maintenance and cleaning of the collection system with more frequent cleaning and maintenance targeted at known problem areas. The PM

program should have a system of tracking work orders and assessing the success of the PM program. EPA is prepared to work with the Board to develop a more comprehensive description of the important elements of an effective PM program.

Response:

WDRS changed to incorporate recommendations from the US EPA. .

10. Comment:

B. 12. (iv) (F) Rehabilitation and Replacement Program, page 7: Expand this subpart to more fully specify what is expected in this section of the SSMP. As with the preventive maintenance program, sewer rehabilitation and replacement is crucial for the prevention of spills. Among the provisions that could be specified in this section is the need to direct rehabilitation and replacement at sewer pipes which are at risk of collapse or prone to more frequent blockages due to pipe defects. The program should also include regular visual and TV inspection of sewer pipes and a system for assessing and ranking the condition of sewer pipes. Finally, the rehabilitation and replacement plan should include a financial plan that properly manages and protects the infrastructure assets.

Response:

WDRs changed to clarify the requirements.

11. Comment:

B. 12. (vii) Overflow Emergency Response Plan, page 8: EPA suggests specifying that the plan must result in timely response to spills and other emergencies. EPA region 9 expects collection systems to be able to respond to a sewage spill in less than an hour from the first call. The system should be capable of meeting this response time day or night, every day of the week. EPA also suggests specifying, perhaps at subpart (F), that the system must own or have ready access to spill and emergency response equipment such as vacuum trucks, hydroflushers, pumps, temporary bypass hoses, and portable generators.

Response:

WDRs changed.

12. Comment:

FOG Control Program, page 9: Expand subpart (B) to describe the elements of an effective grease control program including requirements to install grease

removal devices (such as traps or, preferably, interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements. An effective grease control program must also include authority to inspect grease producing facilities, enforcement authorities, and sufficient staff to inspect and enforce the grease ordinance.

Response:

WDRs changed.

13. Comment:

SSMP Time Schedule, page 10: EPA strongly recommends that the Board shorten the due dates for the various elements of the SSMP. As a matter of good engineering practice and public responsibility, every collection system should already have in place each of the elements called for in the SSMP. It is fair to provide some time for systems to document their current SSMP practices. But two to five years is too long to wait for crucial plan elements such as grease control, capacity evaluation, and the sewer rehabilitation/replacement program. Each of these programs is crucial for the prevention of SSOs and should be put in place as soon as possible. These program elements can always be revised as the system collects new information. The Emergency Response and preventive maintenance programs should really be in place now. The systems could be given a short period to document these programs in a written SSMP.

Response:

WDRs changed.

2.0 Garden Grove Sanitary District, December 12, 2001

1. Comment:

The Garden Grove Sanitary District presents the following comments to the California Regional Water Quality Control Board ("the Board") regarding its Tentative Order No. 01-99. [Note: The Garden Grove Sanitary District ("GGSD") is a sanitary district existing under Health and Safety Code sections 6400, et seq. The District was reorganized as a "subsidiary district" of the City of Garden Grove by Local Agency Formation Commission Order 96-14, on May 29, 1997. As a result of that reorganization, the City Council of the City of Garden Grove became the governing body of the GGSD in May 1997. The City of Garden Grove had no involvement with GGSD prior to the reorganization date].

Response:

The staff report cited a sewage spill, in Table 1, attributed to the City of Garden Grove, which should be attributed to the Garden Grove Sanitary District.

2. Comment:

The GGSD shares the Board's concerns over sewage spills. The City of Garden Grove City Council has, since taking over the sanitary district in 1997, in fact embarked upon an aggressive program to survey and inventory its 300 plus miles of sewer lines in the community to establish appropriate operational, maintenance, and capital improvement programs. To date, GGSD has expended approximately $1 million dollars in engineering fees to initiate this process. In addition, the district has already expended over $3.5 million dollars to construct new and improved sewer lines. The District has engaged the professional services of AKM Consulting Engineers under the direction of Zeki Kayiran to assist in this effort.

Response:

Comments noted.

3. Comment:

<u>Process of Formulating Sewer Regulations:</u>

The GGSD agrees conceptually with the goal of updating sewer systems for the purpose of avoiding sewer spills and potential contamination of surface water streams and coastal waters. The comments we offer are intended to assist in the development of workable and reasonable regulations. To date, the Board staff has submitted its draft regulations to local agencies for comment. The regulations were drafted without initial input from affected local agencies. Sewer collection systems vary widely from city to city, region to region, and from state to state. Many systems in other parts of the country involve combined storm water and sewer collection systems, with appropriate pretreatment facilities. These significant system variations challenge the legislative rule making process because often times the promulgation of a regulatory rule may be very unrealistic and unfair in its application to a specific locality or region.

Recognizing this key fact, we respectfully suggest that more time be spent with local agencies in a fact finding process dedicated to developing regulations that can be effective yet fair and realistic in their reach. That is, the Board and its staff should sit down and work with local agencies to mutually develop regulations that will work in a productive and reasonable manner. We suggest that the process used to date of unilaterally drafting regulations and then

requesting comment will not be the most productive. We note additionally that the Board has not conducted a specific study to support with specificity the basis for these regulations. The absence of a study raises fundamental questions regarding whether the thrust of the regulations will have any relationship at all to achieving significant gains in improved water quality.

One example of a need for better coordination with affected local agencies relates to the present grease study by the Orange County Grand Jury. It is studying the role of grease caused spills in water pollution. Many other parties are looking at this same issue. The Board should not unilaterally impose grease control plan requirements on local agencies without first consulting with those affected agencies and other interested parties such as the Grand Jury.

Accordingly, we respectfully recommend that the Board direct the Board staff to organize a series of meetings to explore goal setting, consideration of cost impacts, definition of feasible mitigation measures, adequate maintenance and training activities, and from this dialogue process, then mutually develop sewer regulatory provisions that better meet the statutory objectives expressed in Water Code Section 13241.

Response:

The allegation that Regional Board staff has “unilaterally” issued the proposed WDRs, without input or coordination with all affected agencies, in order to “unilaterally impose grease control plan requirements”, is not accurate, and is not supported by the evidence in the record. Staff has a long history of working closely with the Orange County District Attorney, and is aware of the findings of the Grand Jury. In fact, members of the Grand Jury have been present at meetings where Board staff gave presentations on our plans to draft the proposed WDRs, and include requirements for a grease control program. Board staff has also testified before the Grand Jury during their deliberations on urban runoff and other water quality issues. Board stall has also presented the tentative WDRs at a meeting of the City Managers of Orange County, and held several workshops for sewage collection agency staff to get their input and comments. Staff held these workshops prior to issuing the tentative WDRs for public comment, on September 19, October 18, and November 14, 2001, at OCSD’s offices in Fountain Valley.

The process followed by staff in the development of the WDRs is identical to that recommended by GGSD in the above comment. GGSD has been kept informed of every meeting, and had staff present at the meetings. GGSD has also alleged, falsely, that the WDRs require all restaurants to install grease traps or interceptors, the WDRs will require the district to replace their entire collection system at a cost of $500 million, and that the WDRs prohibit all SSOs. These

allegations are false and not supported by the evidence in the record, including requirements in the proposed Order.

Staff believes that the existing Basin Plan prohibition is reasonable, valid, and enforceable. The Regional Board has a 30-year record of enforcing this prohibition, and the WDRs formalize this effort.

4. Comment:

Key Provisions of the Regulations Are Not Reasonable, Lack Specificity, And Raise Serious Questions of Intrinsic Unfairness.

The GGSD has retained the engineering services of AKM Consulting Engineers. This firm has special expertise in the field of sanitary engineering. We have asked them to evaluate the tentative order. AKM has found that certain key provisions of the regulations are not reasonable or otherwise lack specificity such that the Regulations cannot be fairly classed as reasonable. (See attached letter from AKM, dated December 12, 2001.) As examples, B.7. mandates that the discharger …"provide adequate capacity to convey base flows and peak flows, including wet eather related events, for all parts of the collection system owned …by the discharger." Our engineer, Mr. Kayiran, notes however that this blanket requirement may actually be counter-productive in given factual circumstances. (See p. 3-4 of letter.)

Response:

AKM consulting and GGSD state that the proposed WDRs lack specificity and therefore cannot be considered reasonable, while at the same time stating that the WDRs need to be flexible to account for differences between sewage collection systems. They cite Provision B. 7 (C.8 in the latest version) as an example of a requirement that lacks specificity, and that is not reasonable and counterproductive.

Provision No. C.8 is a standard provision in almost every NPDES permit and WDRs. This requirement is also standard in enforcement orders issued to agencies that do not provide adequate funding, capacity, operations and maintenance of their sewage collections system. The provision is general to allow for and accommodate differences between systems and it does not specify a criterion for each system. This is what GGSD is recommending.

5. Comment:

Under B.2. and 3., the public agency is to be held strictly liable for spills caused by forces beyond the direct control of the agency (for example, severe storms) where the Board makes its own subjective judgment that the agency through the

exercise of reasonable engineering judgment could/should have installed additional auxiliary systems, etc. It is very often that reasonable minds can differ over the availability and suitability of potential mitigation measures. This language has no real substance and is therefore no standard at all.

Response:

Both the Clean Water Act and the California Water Code have always held any person or agency liable for discharges of raw sewage to a surface water body. The existing laws impose strict liability on GGSD for any sewage discharged from its collection system that reaches waters of the State. The maximum liability imposed under these laws is $10,000 per day for each day of discharge, and $10 per gallon of sewage discharged, in excess of 1000 gallons, that is not cleaned up and recovered. Neither the tentative WDRs, nor current Regional Board policy, would impose new liability on an agency for spills that are caused by factors beyond the control of the discharger, as stated in this comment. Provisions B.2 and 3 do not establish liability for spills beyond the control of the discharger. The proposed WDRs do require the agency to prove that the discharge of sewage was caused by factors beyond their control, and provide evidence to support this claim. Staff has found that many sewage collection agencies claim that all sewage spills are caused by factors beyond their control, in order to avoid responsibility and to limit liability, when if fact many spills can be prevented. Many times sewage spills can be contained and cleaned up by the installation of a very simple and cheap dam installed to contain the spilled sewage, and pumping the sewage back into the collection system.

6. Comment:

Under B.6., the regulation speaks very broadly to the obligation to "… properly fund, manage, operate, and maintain with adequately trained staff and contractors possessing adequate knowledge, skills, and abilities as demonstrated through a validated program…all parts of the collection system." While we agree with the general intent of B.6., it is so vague that it does not provide reasonable certainty to regulated agencies as to what is really required. The reality is that: a) "proper funding" is ill defined. There are many factors that go into the expenditures that need to be made to a system both short and long term. Certainly, our view is that local officials who manage the system need to make those choices. What criteria would the Board apply to determine whether adequate funding is being made? b) We know of widely accepted training certification process - at least one that is widely available in this area. Certainly, the tentative order does not suggest any. Thus, this requirement is not reasonable because there is no way at present to officially validate training. This is certainly an area where the Board should mutually work with local officials to develop as we suggest in item #1 above; c) There are no criteria for evaluating

management techniques and therefore we believe that this very general expression is unreasonable and unenforceable.

Response:

This provision is intended to provide flexibility; what is considered as proper funding for Huntington Beach may not be appropriate funding for GGSD. This provision allows the flexibility that GGSD requests.

Staff agrees that there are no criteria, anywhere to our knowledge, for evaluating management techniques. We are also not proposing to establish any management techniques in the proposed order. We are proposing that GGSD be managed in a manner consistent with the standards of the wastewater collection industry. Staff investigates and regulates sewage collection and treatment systems that are managed with a wide variety of methods and techniques.

For example, the City and GGSD do not have a grease control program and suggest that we coordinate with the Grand Jury before requiring them to have a grease control program. Staff believes that a grease control program is a minimum requirement for a properly operated sewage collection system, and we believe the findings of the Grand Jury support this conclusion. El Toro Water District, and many other sewage collection agencies throughout the State, have had grease control programs that have been in place since the late 1980's. El Toro Water District's grease control program probably meets the requirements of the proposed order, and seems to help them prevent sewage spills from grease buildup.

7. Comment:

<u>The Regulations Were Not Developed With Consideration Given To Their Economic Impacts.</u>

The Porter Cologne Act requires that Regional Boards give consideration to economic impacts arising from the promulgation of their regulatory orders. (Water Code Sections 13263 & 13241). The tentative order fails to address economic impacts, and the Board has not prepared any study to support any of the regulations. The tentative order (pages 5-8) on its face sets a zero tolerance for spills; that is, any spill within the ambit of (A), or any violation occurring under (B) will be subject to a fine. But the underlying premise of the rule is false; namely, that all spills can be avoided. There will always be spills despite the best laid plans. We respectfully suggest that a zero tolerance/ penal approach is unfair because the clear derivation of the cumulative effect of the various

requirements of the tentative order is that a public agency must expend whatever sums are necessary to avoid any spill regardless of the circumstances of the event or other factors affecting that particular public agency. We also note that the federal CMOM regulations also suffer from the same faulty premise. This was noted in the joint remarks of the National League of Cities, National Association of Counties, Association of Metropolitan Sewerage Agencies, American Public Works Association, TRI Tac, and the Water Environment Federation, dated March 5, 2001, addressed to the EPA. (See attachment).

Response:

Please note that the proposed WDRs implement an existing provision of the Basin Plan and therefore need not reconsider Section 13241. Section 13241 is applicable in adopting Basin Plan objectives or other new regulations, not for implementing exiting regulations. Other factors under Section 13263 were considered in developing the WDRs.

The tentative order does not set a "zero tolerance" approach as alleged. Staff is recommending that the Board adopt the WDRs to inform the permittees what is expected of them in terms of the management and operations of their sewage collection system. If the permittees don't have these basic measures in place to prevent SSOs, then the Board will consider this factor in imposing any fines.

Under current laws and regulations, any discharge of sewage by GGSD or any agency to any surface water body is subject to civil liability; criminal liability if it is an intentional discharge.

8. Comment

As our consultant has noted, GGSD would have to expend $500 million dollars, or more, to raise its system to a level that would approximate a "no-occurrence" level. This arises from the fact that the Garden Grove collection system was largely constructed many years ago under different standards. Even with a completely revamped system, some spills would occur as no system is fail safe. If the tentative order means that this district must expend such large sums in the near term (5-10 years), we would argue that is well beyond the realm of reasonableness because this would be an economic impossibility without a large infusion of funding from federal and state government sources. We note that the order is silent on funding. Yet, several factors the Board is to consider (pursuant to Water Code Section 13241) is whether its regulations will in fact reasonably promote the stated objectives of the order in consideration of economic impacts. We have not seen any thoughtful study establishing a nexus between the performance/ zero tolerance quality of the provisions and the stated goal reduced ocean contamination particularly in relationship to the dire economic consequences facing this and other impacted entities. We further suggest that

the events of September 11 and the current economic recession be seriously considered in this process.

We have initiated engineering studies that identify capital improvement programs that we believe achieve much and are reasonable, but do not extend to the point of bankrupting this district. Any fair, reasonable cost-benefit analysis would not reach the draconian result, which these regulations seemingly dictate. In conclusion, we do not believe that the regulations, in light of the above stated circumstances; meet the mandate of Water Code Sections 13263 and 13241.

Response:

This comment is based on the erroneous assumption that the order requires a "leak proof" sewer system. The draft WDRs do not require such a system. Also see response to Comment # 7, above.

9. Comment

<u>Imposition of Penal and Civil Remedies For Alleged Violations of Vague Requirements Raises Serious Questions of Intrinsic Unfairness.</u>

The regulations impose very generally stated requirements that each public sewer system be maintained and operated without spill occurrences regardless of cause or cost. The Board in the tentative order reserves its subjective judgment to pick and choose when an agency may have a valid reason to avoid a strict liability claim by the Board. Further, the Board requires the preparation of a SSMP which appears to require an error free operational and maintenance performance standard. The regulations fail to indicate any criteria by which to judge whether a proposed plan will be suitable; fail to indicate any procedural mechanism by which the Board will acknowledge whether it will approve submitted plans; and fail to indicate whether there is any timetable expectations with respect to plan goals.

We respectfully submit that this performance oriented order is in fact standardless and would expose public agencies to potential criminal and civil remedies without providing any clear direction to the public agency in its efforts to avoid spills. If the Board is to impose criminal or civil fines for spill activity, we suggest that the Board go further to constructively set finite benchmark criteria by which the public agency can gauge its conduct. Therefore, if the Board is to require the preparation of plans, and the public agency makes a good faith effort to develop and comport with the plan, then the Board should advise the entity of the adequacy of the plan and not be punitive where the public agency has in faith made substantial compliance with its plan.

In sum, we offer the following suggestions:

A. Do not enact these regulations at this time. Direct that the Board staff meet with all interested affected agencies for the purpose of mutually developing workable sewer regulations.

B. Conduct a cost/benefit analysis to consider economic impacts arising from the Board's regulatory activity. Focus should be given to studying the relationship of ocean and other waterway pollution in relation to isolated spills in areas directly removed from coastal waters.

C. Acknowledge that a zero tolerance/penal philosophy underlying the present draft regulations is inappropriate; that serious penalties should be limited to egregious circumstances.

D. Adopt a philosophy that if local agencies are to adopt a SSMP, the imposition of substantial penalties against a public agency is inappropriate where the agency is in substantial compliance with its plan.

E. Accept the proposition that sewer collection systems can and do vary; that a sewer regulatory scheme contain flexibility in a manner that reasonably takes into account the unique needs and problems of each affected agency.

Response:

This is the summary and conclusion of GGSD's comments on the proposed order and the previous responses have addressed each of the issues raised in this summary. In summary:

A. Staff has worked with the sewage collection agencies in Orange County and will continue to work with these agencies in the development and implementation of these WDRs.

B. Please note that a cost/benefit analysis is not required under Section 13241 as this order only implements an existing provision of the basin Plan.

C. The WDRs do not include a "zero tolerance" approach.

D. The WDRs implement existing laws and regulations including any penalties prescribed in the California Water Code and the Clean Water

Act. The Water Code requires the Board to consider a number of factors in assessing any penalty, including the compliance history.

E. The proposed order provides flexibility to the permittees (also see response to GGSD's Comment #3, above).

3.0 Garden Grove Sanitary District, December 19, 2001

1. Comment

The proposed changes address issues of fairness, reasonability, predictability, and consistency with EPA regulations. We believe that our proposed changes will increase the ability of permitees to comply by providing clarifications, increase the understandability of the permit by utilizing language consistent with local government terminology and practices, provide an incentive for early adoption and implementation of conforming SSMPs, and provide for a more reasonable reporting program.

Response:

Comments noted.

2. Comment

Findings 4. – We do not believe that current data indicate that most SSO are easily preventable, although many may be. We also do not believe that source control measures, which we take to primarily mean the grease and fat program, will have as great an effect as the Board indicates here. In the older portions of the county, a flat topography combines with a large concentration of Asian and Latin American immigrant populations to provide significant grease and fat loadings from residential uses. This is especially true in areas dominated by high-density and often over-crowded housing patterns. Aside from education, which may or may not be effective in so fundamental an aspect of life and culture as food preparation, we do not believe that there are any source control measures that will have any effect on these problems.

Response:

The staff report cited the proceedings from a conference of wastewater collection system professionals held by USEPA that disagrees with GGSD about whether sewage spills can be prevented (Page 2). The proposed order requires each agency to evaluate its grease control problems and propose solutions that it believes will work in its system. We have purposely left the language of the

grease control program requirement general to encourage innovation, creativity, and alternative solutions in order to avoid the “one size fits all” approach.

3. Comment

B.2. – We do not understand the meaning or the reason for “properly signed” operating logs, especially since such logs would, presumably, have to be submitted with some sort of affirmation of their accuracy and authenticity.

Response:

The reason for the requirement is to provide some affirmation and authenticity to written documents.

4. Comment

B.2.ii. – We believe that the term “reasonable engineering judgment” needs to be defined.

Response:

The courts have already made a determination regarding the term “reasonable engineering judgement”, (please see ……). Staff to evaluate sewage collections systems, when there are no specific regulations adopted to allow for flexibility in engineering design and operations, uses standard engineering practice and judgement. These basic principles of engineering provide a baseline to compare systems.

5. Comment:

B.4. – We believe that some objective standard, either an outside standard such as the one we have suggested, or a set of standards that may be identified and adopted by the Board, should be provided to ensure fair and consistent treatment throughout the length and coverage area of the permit.

Response:

Comment noted. OCSD is leading a committee to develop some standards as suggested in this comment. Once these standards are developed, the WDRs may be reopened to incorporate the standards.

7. Comment

B.6. – The term “proper” funding, etc., is too ambiguous, and therefor can neither be complied with, nor enforced. We are also unsure what the nature and purpose of the “validated” program is.

Response:

See comment No. 6 from previous comment letter from GGSD, and the subsequent response.

Several wastewater industry professional organizations provide programs that give sewage collection workers the basic knowledge they need to do their job in compliance with the existing laws and regulations. One such agency, the California Water Environment Association has a training and certification program (please see Section **13**, below). The proposed order requires that sewage collection system operators be properly trained and provide proof of that training.

8. Comment:

B.7. – Because many of the sewer systems in Orange County were built decades ago, they will require substantial rehabilitation or rebuilding to assure capacity ratings. We believe that this should be taken into account, and suggest a reasonable effort standard, in conjunction with the SSMP, in order to work toward a system with adequate capacity throughout its key components. We also believe that the wet-weather-related provision is too vague, and have suggested that normal wet-weather events be the criterion, since designing for one-hundred-year storms, for example, would be both cost prohibitive and wasteful.

Response:

Please note that the order does not require that the sewer systems be designed for a 100-year storm event.

9. Comment:

B.8. – We believe that practicality, rather than feasibility, should be the standard, since many step could be “feasible” from a technological perspective, while being entirely impractical in the real world. We also believe that the permits overriding emphasis on prevention should be reiterated in this provision.

Response:

Comment noted.

10. Comment

B.10. – The requirement to make the SSMP available to the public upon request is duplicative of the cities' Public Records Act responsibilities, and therefore, unnecessary.

Response:

Comment noted.

11. Comment:

New Section Labeled 10.5, and 11 – We believe that the Board should review and approve SSMPs to ensure compliance with the permit. In conjunction, we also believe that jurisdictions that have a Board-approved SSMP, and are in substantial compliance with it, should be provided a shield against fines and prosecutions. These provisions will encourage early adoption and implementation of SSMPs, while ensuring permitees that compliance with an approved SSMP will constitute compliance with the WDRs.

Response:

Provision No. 12 of the proposed order states that the Board will consider the quality of a discharger's SSMP, its implementation, and its effectiveness in any relevant enforcement action. Since staff cannot predict all possible circumstances under which a sewage spill, and discharge to waters of the state, can occur, it is impossible for staff to predict all possible mitigating factors. That is why staff included a requirement in the proposed order to periodically review and update the SSMP, to allow for changes and innovations in the industry and for the changes to be adapted to individual systems as appropriate, based on reasonable engineering judgement. The SSMP should be a living document that is capable of incorporating innovative ways to prevent sewage spills and sewage discharges to waters of the State.

12. Comment:

B.11.iv.D – This provision is redundant with 11.iv.A.

Response:

These two SSMP requirements specify that the SSMP include both routine maintenance and long term maintenance plans. These should be different depending on the design, construction, and size of the sewer, sources of grease, root and other blockages, and many other factors.

13. Comment:

B.11.iv.F – We believe that capacity and structural problems need to be considered together. In addition, requiring them to be part of a capital improvement program places them in a universally recognizable structure within local government systems.

Response:

Structural problems pose an immediate threat of causing sewage spills. When pipes collapse and break, they are prone to blockage and need immediate attention, not deferred maintenance. Delaying the repair of structural problems, and failing to report these problems to the Regional Board, are a major concern of staff.

14. Comment:

B.11.iv.H – The provision is too vague and wide-ranging. We believe that the identification and keeping on hand of items necessary to prevent SSOs accomplishes the Board's goals without requiring potentially expensive inventories and storage space for items that will not necessarily assist in preventing or responding to SSOs.

Response:

Comment noted. GGSD has the flexibility to propose this in their SSMP in a manner that they believe is appropriate for GGSD.

15. Comment:

B.11.iv.J – Since the agencies have no control over the maintenance and operations of building laterals, we do not believe that spills caused by them should be considered the same as system SSOs. When they reach rights-of-way, however, we do agree that every effort should be made to prevent their reaching waterways beyond the MS4s. This also better comports with the federal CMOM approach.

Response:

Any person who discharges sewage to waters of the State is responsible and liable for that spill. If a permittee does not own the system from which a spill occurs it is not liable, and the proposed WDRs do not change this basic legal fact. The proposed order does comport with the federal CMOM approach in this regard.

16. Comment:

B.11.iv.K – We do not believe that the Board has demonstrated that there is any lack of viable grease and fat disposal capacity in the county that would warrant this requirement. The problem is getting people to use the available disposals options other than the sanitary sewers. In addition, local governments lack the expertise to undertake and oversee such a plan and program.

Response:

We are not aware of many grease disposal facilities within the Region. The plan and program may be developed in collaboration with all the permittees in Orange County.

17. Comments:

B.11.v.A & B – Change the language to more closely align with actual local government terminology.

B.11.vi.C – Simplified language.

Response:

WDRs changed.

18. Comment

B.11.vii.C – We believe that reporting every spill immediately would be unduly burdensome for both sewer agency and Board staff, and suggest that immediate notification be limited to spills that potential endanger human health, or that are fairly large (1,000+ gallons).

Response:

Based on this, and other comments regarding the reporting requirements, the requirements have been changed.

19. Comment:

B.11.viii – We do not believe that the SSMP is a proper vehicle for actually creating legal authority. The documents actually creating the legal authority should be identified, but will need to be adopted through a separate process.

Response:

Comment noted.

20. Comment:

B.11.viii.A – Clarifying language.

Response:

WDRs changed.

21. Comment:

B.11.viii.B – We believe that a practicability standard needs to be used here. As discussed above, many grease problems are caused by residential uses, for which there are likely to be no practical source control measures beyond education.

Response:

Comment noted.

22. Comment:

B.11.ix – Clarifying language.

Response:

WDRs changed.

23. Comment:

B.11.ix.B – Clarifying language.

Response:

WDRs changed.

24. Comment:

B.11.ix.C – We do not understand the necessity of annual SECA updates if there are no deviations from the adopted program and schedule.

Response:

WDRs modified in response to this and other comments.

25. Comment:

B.11.x – Clarifying language.

Response:

WDRs changed.

26. Comment:

B.11 (schedule) – Suggested timing changes.

Response:

WDRs changed in response to this and other comments.

27. Comment:

H.1.b.3 – We are suggesting that the EPA's certification language be used instead, since we believe that that language better reflects both a realistic view of sewer system operations and a more accurate and complete statement of the law.

Response:

WDRs changed.

28. Comment:

MONITORING AND REPORTING PROGRAM

A.1 – We believe that the SSO definition should not include private-lateral-caused spills over which sewer agencies have no control.

Response:

WDRs changed in response to this and other comments.

29. Comment:

A.2 – Clarifying language.

WDRs changed.

30. Comment:

B. – Since most of these provisions set out recordkeeping requirements, the title should reflect that.

Response:

Comment noted.

31. Comment:

C.1 - We believe that reporting every spill immediately would be unduly burdensome for both sewer agency and Board staff, and suggest that immediate notification be limited to spills that potential endanger human health, or that are fairly large (1,000+ gallons).

Response:

WDRs changed in response to this and other comments.

32. Comment:

C.1, 2 & 2.5 – We believe that the entirety of the information required in the 24-hour report would be difficult to provide in every case. We are suggesting using the CMOM reporting requirement of basic information within 24 hours, and a more thorough report within five days.

Response:

WDRs changed in response to this and other comments.

33. Comment:

C.3 – We do not believe that storm drains should be treated as surface waters unless there is an actual discharge of sewage from the MS4 to some actual surface water.

Response:

WDRs changed in response to this and other comments.

34. Comment:

C.6.i – Conforming and clarifying changes.

Response:

WDRs changed.

35. Comment:

C.6.j – Appears redundant with the information otherwise required by the SSO report form and section C.6.

Response:

WDRs changed.

36. Comment:

C.7 – This is either a self-reference or a reference to the WDRs themselves, which do not contain a section C.7. We believe the intent was to cross-reference to WDR section H.1. Also consistency language.

Response:

WDRs changed.

37. Comment:

C.8 – We do not believe that the reporting period should begin before the month in which the WDRs are adopted.

Response:

WDRs changed.

38. Comment:

C.10 – Conforming change.

Comment noted.

39. Comment:

(Attached to the GGSD letters were a December 12, 2001 letter from Zeki Kayrian, P.E. to GGSD that was used in the comments letter submitted by GGSD, and the responses above also respond to this attachment. This applies to all attachments, submitted in support of comment letters.)

4.0 Orange County Sanitation Districts

1. Comment:

The Orange County Sanitation District (OCSD) is submitting the following comments in response to the Regional Water Quality Control Board's (RWQCB) Tentative Order No. 99-01 - General Waste Discharge Requirements for Sewage Collection Agencies in Orange County, and the Tentative Monitoring and Reporting Program. In general, OCSD supports the language of the Tentative Order, which we believe, supports sound asset management programs necessary for the protection of the public health and the environment. However, we have some suggested changes meant to create a more effective permit that can be implemented by all parties.

We want to first compliment Ken Theisen of your staff for his hard work developing the Tentative Order. Mr. Theisen met on numerous occasions with our agency and the other contributing cities and sanitary districts. He provided important information on the RWQCB's vision for this permit, and he received comments graciously and listened openly to the concerns expressed by the regulated community. We recognize that this is a ground-breaking permit, and we look forward to working cooperatively with the RWQCB, our member agencies, and the community in addressing sanitary sewer overflows (SSOs) to limit beach closures and protect other beneficial uses of surface waters.

The issues of SSOs and beach closures are important for our local communities. Millions of local residents and tourists visit Orange County beaches each year; and beach closures and public health advisories impact the public's ability to use and enjoy these jewels of the California coast. OCSD and the other agencies in our service area have taken aggressive steps to reduce SSOs and prevent their impacts to local beaches and recreational waters.

Actions OCSD has already taken include: SSO prevention and response planning, internal and regional training to implement the SSO prevention and response planning measures, an SSO reporting notification procedure, including an innovative electronic reporting database to provide faster notification to regulators of SSOs, and after-action SSO forensics to identify SSO causes and future avoidance procedures. OCSD staff has been working with the State Water Resources Control Board

(SWRCB) to develop a statewide SSO database for better accessibility of SSO reporting to the public.

All of these actions are necessary to reduce the frequency and impact of SSOs. Unfortunately, the impacts are still significant. As noted in the RWQCB staff presentation on beach closures, there are 15,330 beach-mile days available during each year. In 1999 and 2000, there were 51 and 55 beach-mile days lost to SSOs, respectively. That is only one-half of one percent of the total beach-mile days available to the public, but far short of our goal of zero beach-days lost. More has to be done to protect the beneficial uses of our beaches and surface waters. Much more.

Like most other agencies here in Orange County, OCSD experiences few SSOs relative to the miles of collection system pipes and the total volume of flow. We own and operate 650 miles of collection system pipes, 20 pump or lift stations, one water reclamation plant and one wastewater treatment plant. In total, we receive and treat over 240 million gallons per day of wastewater. During the 1999-2000 and 2000-2001 fiscal years, the agency lost an estimated 78,335 and 4,015 gallons respectively, due to SSOs. At the same time, we successfully transported an estimated 178 billion gallons of sewage through the collection system.

The message from these numbers is that we are performing quite well, but imperfectly, in transporting sewage for reclamation and treatment. Our efforts to further reduce SSOs will be targeted at identified problem areas. However, its our professional opinion that the elimination of all SSOs is an unrealistic and technically unachievable standard. Far too many factors remain out of our control. OCSD has a broad-based program, which for the most part, ensures the proper transport of sewage. These programs include the following activities:

- Regular planning to meet community needs including the 1989 Master Plan and the 1999 Strategic Plan.

- An annual Collection Facilities O&M survey/outreach program (now in its fifth year) with our member cities and agencies. Its goals are to become more knowledgeable of the assets managed by our satellites, to leverage our regional expertise, and promote improved networking among cities and collection system owners, operators, and managers. During these meetings, we gather and exchange information regarding wastewater collection system operations and maintenance (O&M) and other pertinent issues in the OCSD service area, help build a greater understanding of asset management programs among the OCSD satellite system managers, and network about common issues and concerns, particularly funding issues. Our member cities and agencies continue to struggle with the mandated diversion of local funds

and fees to the state budget, which leaves the cities with local budget shortfalls to meet local program needs.

- The Capital Improvement Plan to replace and add facilities as necessary to meet increasing demands for service.

- The Cooperative Projects Program which assists contributing cities and agencies in identifying and reducing excess inflow and infiltration into the regional system. Although OCSD offers cooperative funding (up to 50% matching grants) to help reduce inflow and infiltration, OCSD and its member cities and agencies would like to see more grant funding sources to assist with implementing this measure. We understand that the SWRCB has recently expanded the State Revolving Fund (SRF) to include monies for collection systems. The cities and agencies in our service area would especially benefit from such grants or loans as they bring their asset management programs up to speed. Another suggestion would be to allow dischargers to apply for State Fund Clean-up and Abatement account funds to meet the requirements of this permit, since the main purpose of the permit is to reduce SSOs and the account is funded by SSO fines.

- A High-Flow Integrated Emergency Response Plan to prepare for and respond to extreme wet-weather events.

- An operations and maintenance program for the collection system, including routine cleaning, maintenance and inspection of our pump stations and regional collection system, which allows us the high efficiency level stated above.

Response:

Comments noted.

2. Comment:

We would also like to draw your particular attention to three other important issues:

1) The definition of a sanitary sewer overflow as expressed in the General Waste Discharge Requirements (GWDR) and the Monitoring and Reporting Program. These definitions should be consistent with each other and the California Water Code;
2) The Subsurface Discharge Tracking Plan should be removed in favor of the approach outlined below;
3) The affirmative defense provision of the GWDR is a key component since it recognizes the efforts by each of the individual agencies to prevent and

respond to SSOs. We believe that it is important that this remains an integral part of the permit; and

4) The District recommends that the Beach Water Quality Group work to address the issue of calculating SSO volumes. They should eventually also work to develop guidance on exfiltration concerns. Based on their excellent track-record, the District is confident that this group can effectively answer this need.

Response:

See responses to specific comments below.

3. Comment:

Waste Discharge Requirement, Finding 1: To ensure there is no confusion regarding the dischargers' individual compliance responsibilities, the District requests that the following sentence be changed to state that the District's role is "to facilitate compliance by each permitee," rather than, "for the purposes of complying." The sentence will then read: **"Since most of these dischargers are tributary to the Orange County Sanitation District (OCSD), the OCSD may lead a steering committee for all other entities tributary to OCSD, to facilitate compliance by each discharger with the requirements of this Order."**

Response:

WDRs changed.

4. Comment:

General Waste Discharge Requirements – Under Finding No. 2, the definition of an SSO includes all discharges from a sanitary sewer system prior to treatment or proper disposal. OCSD believes that this definition is too broad, and it should be limited to unauthorized (unpermitted) discharges that reach state waters or cause a nuisance. This is consistent with the California Water Code, §13260(a)(1), which requires persons to file a report of discharge if they propose to discharge wastes that could affect the quality of the waters of the State. Not all SSOs, as defined in the General Waste Discharge Requirements, impact waters of the State. The following definition is consistent with the California Water Code: **"A sanitary sewer overflow is each instance of an unauthorized discharge from a sanitary sewer system that reaches State waters or causes a nuisance."**

Response:

WDRs changed.

5. Comment:

General Waste Discharge Requirements – Finding No. 6 refers to "the AB411 period." This should be made more clear for those not familiar with the legislation by referring to the California Department of Health Service's Beach Sanitation Standards that were adopted pursuant to Assembly Bill 411 (1997). OCSD suggests that this sentence should read, **"Therefore, warning signs are posted at storm drain outlets to the ocean during storm events along the beach when the California Department of Health Service's Beach Sanitation Standards apply, otherwise a rainfall advisory is issued by the Orange County Health Care Agency for all storms."**

Response:

WDRs changed.

6. Comment:

General Waste Discharge Requirements – Under Prohibitions, Section A, the language, "Neither the bypass nor the upset provisions at 40 CFR 122.41(m) and (n) apply to these discharges." is used. This language appears to come from the United States Environmental Protection Agency's (EPA) proposed SSO rule issued in January 2001. OCSD does not believe that this language should be included at this time. The EPA has indicated it intends to consider significant changes to the proposed rule by fall 2002. There has been considerable discussion between the EPA, public interest groups and municipal discharger organizations (including the Association of Metropolitan Sewerage Agencies and the Water Environment Federation) regarding the proposed SSO rule. It seems appropriate to remove this language from the General Waste Discharge Requirements until the final federal Capacity, Management, Operations and Maintenance (CMOM) rule is published. Also, this has been an area legal dispute with a recent case appearing to have decided that the upset provision may apply to SSOs. Finally, the language does not appear to add any useful information to the Prohibitions section of the Tentative Order, and its removal would not reduce its effectiveness.

Response:

WDRs changed.

7. Comment:

General Waste Discharge Requirements – Also in the Prohibitions, Section A, there is a reference to "any drainage system intended to convey storm water runoff to surface water streams." OCSD recommends that this language be removed from the General Waste Discharge Requirements at this time. It is our understanding from staff that this language was added due to references in the Santa Ana Regional Water Quality Control Plan (Basin Plan); however, it creates a number of unresolved issues. First, there has been considerable debate about whether or not this includes the curb and gutter drainage found along most municipal streets. This type of an approach would render current efforts to prevent SSOs from reaching state waters as worthless. Our current SSO response procedures rely on capturing sewage flows that leave the collection system along the curb and gutter or other street drainage areas, in order to return these flows to the sanitary sewer collection system as rapidly as possible and with the least amount of impact to State waters. The language of the Tentative Order should not be subject to an interpretation that the curb and gutter (or similar system) is a State water or subject to water quality standards.

Furthermore, including the stormwater conveyance system as part of the Tentative Order may interfere with future attempts to better define what areas of the stormwater system require protection under recreational water quality standards and develop mitigation measures. OCSD is currently conducting a study of the transport of wastewater in the local stormwater system and we have been working with the County of Orange Public Facilities and Resources Division to develop means to intercept dry-weather discharges from the stormwater facilities and diverting them to the sanitary sewer system. OCSD recommends that we use this first five-year period of the Tentative Order to better define where water quality standards should apply in the stormwater system, and define what measures can be taken to capture and remove SSOs from the stormwater system.

Ultimately, the water quality standards remain applicable as defined in all State waters. The Basin Plan language cannot broaden the powers of the RWQCB beyond the authority granted by the Porter-Cologne Water Quality Control Act and the Water Code. It appears that the Basin Plan language was designed to prevent indirect discharges into surface waters via the storm drain system. This approach should not prevent the reasonable use of that same storm drain system to capture urban runoff or SSO flows, where appropriate. This proposal is not designed to reduce or ignore any protection of water quality currently provided for in the Basin Plan or California law, but the RWQCB should evaluate the context and intent of the current Basin Plan language. OCSD recommends that the final Prohibitions, Section A should read: **"The discharge of untreated sewage to any State surface water is prohibited."**

Response:

This provision implements the Basin Plan; and this order cannot change the language in the Basin Plan. The intent of the order is to enforce this prohibition. However, other changes to the order respond to the concern about considering the gutter and enclosed storm drains as waters of the State.

8. Comment:

General Waste Discharge Requirements – Under Provisions, Section B, 2. (ii), the phrase "exercise of reasonable engineering judgment" is used in reference to the need to build adequate facilities to weather severe natural conditions. OCSD recommends that this phrase be qualified with the recognition that conditions change over time. Ensuring a comprehensive planning effort is addressed effectively in the Tentative Order System Evaluation and Capacity Assurance Plan, so qualifying the language will not take away from the discharger's proper capacity planning requirements. Establishing and implementing an effective planning effort is an important goal that should be emphasized in this first permit. In retrospect, it is always much easier to justify the need for facilities that were not known or recognized during facilities planning. An example of this is the work that OCSD has undertaken to divert some dry-weather urban runoff flows from our contributing cities and the County of Orange to the OCSD treatment facilities. These flows were not predicted during the agency's strategic planning process, however, they will be incorporated into future planning efforts. OCSD recommends that this section read: **"This provision is not satisfied if, in the exercise of reasonable engineering judgment, at the time that the facilities were planned, the discharger should have installed auxiliary or additional collection system components, wastewater retention, adequate backup equipment, or should have reduced inflow and infiltration. This provision is also not satisfied if the agency does not undergo a periodic or continuing planning process."**

Response:

Please see the changes to the draft order.

9. Comment:

General Waste Discharge Requirements – Under Provisions, Section B 3. OCSD generally agrees with and supports the RWQCB's choice of the language for the affirmative defense section. This section is necessary for the development of a workable Tentative Order. This Provision works in concert with the SSMP to assure its proper development and implementation, and this language fills in a reasonability gap that has been missing from the Environmental Protection Agency's Capacity Management and Operations and Maintenance (CMOM) draft rule.

Response:

Comment noted.

10. Comment:

General Waste Discharge Requirements – Under Provisions, Section B 3. (l), the discharger is required to identify the cause of the discharge event. Due to the nature of some blockages, especially from roots, it is sometimes necessary for the OCSD to make inferences about the suspected cause of an SSO. OCSD recommends that this language be broadened to include the phrase: "the discharger can identify the cause **or likely** cause of the discharge event" under this section to allow for reasonable judgment from the city or agency staff to determine the cause of each SSO.

Response:

WDRs changed.

11. Comment:

General Waste Discharge Requirements – Insert the following language after Finding 10 as subparagraph d: **"Assembly Bill 285 was chaptered on October 4, 2001. These requirements are consistent with the State Water Resources Control Board's reporting requirements in this law."**

Response:

Please see the changes to the draft order.

12. Comment:

General Waste Discharge Requirements – Insert the following language after Finding 10 as subparagraph e: **"The State Water Resources Control Board Office of General Counsel issued a questions and answers paper on April 17, 2001 stating that SSOs are not subject to minimum mandatory penalties."**

Response:

WDRs changed.

13. Comment:

During previous discussions between the RWQCB and the other dischargers in the OCSD service area, RWQCB staff indicated that they would take budget cycles into account when scheduling the due dates for reports and plans. OCSD

would like to request the following changes to the Sewer System Management Plan (SSMP) time schedule. The changes from May 2002 to September 2002 for the SSMP Development Plan and Schedule will give dischargers a quarter in the new fiscal year to complete any tasks that require budgeting for the 2002-03 fiscal year. Subsequent deadlines were realigned as indicated to keep their original even distribution. Also note that the numbering sequence of this section in the General Waste Discharge Requirements is incorrect. It should be numbered as Section 13, not 11.

Response:

WDRs changed in response to this and other comments.

14. Comment:

The discharger shall develop and implement the SSMP according to the following schedule:

Sewer System Management Plan Time Schedule

Task	Original Completion Date	Proposed Revised Completion Date
Monitoring and Reporting Program No. 01-99	Effective on Adoption	No change
SSMP Development Plan and Schedule	May 1, 2002	**September 30, 2002**
SSO Emergency Response Plan	January 1, 2003	**July 30, 2003**
Legal Authority	January 1, 2004	**July 30, 2004**
Grease Disposal Alternatives	May 1, 2004	**September 30, 2004**
Grease Control Program	May 1, 2004	**September 30, 2004**
Capacity Evaluation	January 1, 2005	**July 30, 2005**
Sewer Rehabilitation Plan for Entire System	May 1, 2007	**September 30, 2005**
Final SSMP	May 1, 2007	**September 30, 2005**

Response:

Please see the changes to the draft order.

15. Comment:

OCSD believes that the requirements to report sewer leaks, as stated in the Monitoring and Reporting Program's Section C.10 should be removed from these waste discharge requirements. The goal of the requirements is to reduce the number of SSO-related beach closures. To date, there has been no evidence indicating that the limited exfiltration from publicly-owned sewers in the OCSD service area is impacting local coastal waters. In fact, extensive groundwater monitoring around the City of Huntington Beach's former leaking sewers has shown that exfiltration 1) did not impact the beach water quality and 2) did not impact bacteria levels in the local groundwater.

There are approximately 7,000 miles of publicly-owned sewers in the Orange County area, and approximately 12,000 miles of privately-owned, operated, and maintained laterals. Many of these sewers will exhibit small, “hairline” cracks during their useful life. These cracks are not necessarily indicative of exfiltration, especially if infiltration is not evident, such as longitudinal cracks in the crown of the pipe under open channel flow conditions. However, it is very difficult to know for sure, and even more difficult to calculate exfiltration volumes. Guidance needs to be developed by the regulatory and discharger community to address this issue before any reporting solutions should be considered.

The District believes that the RWQCB should focus this first permit cycle on the most important and pertinent parts of the waste discharge requirements which will also have the most immediate and significant impacts. This first permit cycle lays the foundation for the dischargers to document their O&M plans and capacity planning activities. These inventory, assessing, planning, operating, maintaining, SSO reporting, and documenting activities will require significant resources, but it represents the most significant steps toward reducing the number of SSO-related beach closures. Requiring dischargers to report all sewer cracks and possible leaks will require diverting significant discharger and regulator resources from the other, more important, waste discharge requirements without any evidence that suggests local beach closures will be reduced.

OCSD believes that it is a much more appropriate option to deal with the documentation of sewer cracks as part of the SSMP. The collection system owners will document sewer cracks, and schedule repairs as necessary, as part of the normal system evaluation. All inspection and service records, as currently required by the proposed discharge requirements, will be retained and available for onsite inspections or audits as described elsewhere in these proposed requirements. Therefore, OCSD requests that Section C.10 of the Monitoring and Reporting Program be deleted. This solution avoids the time-consuming and resource-intensive reporting approach initially proposed by the RWQCB, but it offers an effective and comparable end-product while maintaining the objective of reporting SSOs that may impact coastal waters.

Response:

Requirement C.10 has been changed to require the discharger to report subsurface leaks as part of the SSMP.

16. Comment

A few years back, the State Water Resources Control Board (State Board) formed a Beach Water Quality Group (BWQG) to work with dischargers and

environmental groups to address beach closure issues. Through a working subcommittee, the BWQG was effectively able to standardize posting issues and a way to report beach postings (beach mile days) for the state. With the adoption and implementation of these new waste discharge requirements and AB285, there will be a significant need for statewide, standardized and State Board-approved methods for calculating accurate SSO volumes, especially since they will reported into a State Board SSO database and will be available to the public. The District recommends that the BWQG form a subcommittee to create guidance for calculating SSO volumes. They should eventually also tackle guidance on exfiltration concerns. Based on their excellent track record, the District is confident that the BWQG can effectively answer this need and create a statewide guidance and training document. The District has maintained an active role in the BWQG and will be happy to participate in the working subcommittee.

Response:

Staff agrees with this recommendation regarding the calculation of spill volumes, and as a member of the Beach water Quality Work Group, will recommend such a course of action. Staff has modified the proposed order to require the dischargers to develop a methodology for evaluating exfiltration concerns because we believe it is more appropriate for the discharger to address this issue. The beach group doesn't address groundwater issues.

17. Comment:

During previous discussions between the RWQCB staff and the dischargers, the RWQCB indicated that they would like the dischargers to submit one SSMP for OCSD's entire service area. OCSD is leading a Steering Committee that includes a self-selected cross-section of our member cities and agencies. The Steering Committee believes that the city and agency information is diverse and not necessarily suitable for a single document. The Steering Committee will be creating templates for the dischargers to use, but the dischargers will not be required to use them. However, the Steering Committee will attempt to consolidate sections that are the same or similar for all the dischargers, and will attempt to submit the final SSMP in as uniform a format as possible and feasible.

Response:

Staff appreciates this effort and suggestion and believes that this approach will help each sewer system to comply with these requirements in the most cost effective manner.

18. Comment:

OCSD understands that the California Water Code requires the Office of Emergency Services (OES) to be notified when a discharge of raw sewage greater than 1,000 gallons occurs, as indicated by the proposed Permit and Monitoring and Reporting Program. OCSD also understands that OES requires notification when any amount of sewage is discharged to a State water. If this understanding is correct, we suggest that language such as, **"or a discharge reaches a State water,"** be added to the Permits Sections 12. (ii) (B) and 12. (vii) (C) and Monitoring and Reporting Program's Section C.5.

Response:

WDRs changed in response to this and other comments.

19. Comment:

Because the Orange County Health Care Agency (OCHCA) and RWQCB staff will be doing any necessary monitoring and public notification associated with raw sewage spills instead of the dischargers, OCSD suggests removing all references to monitoring such as those references in the following sections:

- General Waste Discharge Requirements, Section 12. (iv) (G) – "Provide training on a regular basis for staff in collection system O&M ~~and monitoring~~ and determine if contractors' staff are appropriately trained;"

- General Waste Discharge Requirements, Section 12. (vii) (F) – Take all reasonable steps to contain sewage and prevent sewage discharges to surface waters and minimize or correct any adverse impact on the environment resulting from the SSOs~~, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge~~.

- Delete Sections B. 5., B. 6., and C.4. in the Monitoring and Reporting Program.

Response:

WDRs changed in response to this and other comments.

20. Comment:

General Waste Discharge Requirements – Private property SSO responses require close coordination with the stormwater agencies and local cities since their facilities could be impacted by an SSO, and they have the local enforcement oversight (through city codes and storm drain discharge enforcement). OCSD therefore suggests adding **"in conjunction with the County of Orange's stormwater requirements"** to the language in Section 12. (iv) (J) as shown below.

- For those agencies which have jurisdiction over the local stormwater system, establish a plan for responding to SSOs from private property that discharge to public right of ways and storm drains, to prevent discharges from SSOs to surface waters and storm drains; and

Response:

WDRs changed in response to this and other comments.

21. Comment:

General Waste Discharge Requirements – Section 12. (vi) (C) mentions modifying the "summary of the SSMP program", but the summary is not mentioned anywhere else in the document. Please clarify what is expected in the summary.

Response:

WDRs changed in response to this and other comments.

22. Comment

General Waste Discharge Requirements – Section 12. (vii) (C) refers to notifying the public and other impacted entities of all overflows. Notification of the public by the dischargers should not be required because OCHCA will close beaches if necessary, and they have standard operating procedures in place for evaluating and communicating health risks to the public through press releases, a phone hotline, and websites. OCSD suggests deleting the comma after public so the sentence refers to public health agencies instead of the public and health agencies.

Response:

WDRs changed in response to this and other comments.

23. Comment:

General Waste Discharge Requirements – Section 12. (vii) (E) says, "Provide emergency operations." Please clarify what this is in reference to, perhaps through an example after the statement as a second sentence.

Response:

WDRs changed.

24. Comment:

General Waste Discharge Requirements – Section B 8. OCSD recommends changing the language of this section to the following: "The discharger shall provide adequate capacity to convey base flows and peak flows, including wet weather related events **to minimum design criteria as defined in the discharger's System Evaluation and Capacity Assurance Plan,** for all parts of the collection system owned and operated by the discharger. "

Response:

WDRs changed.

25. Comment:

General Waste Discharge Requirements – Section B 12. (iv)(E) OCSD recommends changing the language of this section to the following: "Establish a program to assess the current capacity of the collection system owned by the discharger or where the discharger has operational control; including diversions of urban runoff to the sewer system **during dry weather periods** and control of infiltration and intrusion **during both wet weather events and dry weather periods**;"

Response:

WDRs changed.

26. Comment:

The Monitoring and Reporting Program requires that dischargers submit SSO reports for October 2001 - January 2002, but this period is prior to the adoption of the permit. Because this is the first time a permit like this is being issued, some agencies may not have been keeping all the information required by the permit. Because of the fast-track nature of this permit, the dischargers have not had time to collaborate and perform training on how to comply with these requirements. OCSD, therefore, requests that the SSO record-keeping requirements not go into

effect until the permit is adopted, with the first quarterly report submittal for February and March 2002 due in April 2002, assuming the RWQCB approves the permit in January 2002. OCSD will attempt to do a workshop on the requirements and formats for submittals in the spring of 2002.

Response:

WDRs changed.

27. Comment:

The definition of a Sanitary Sewer Overflow in the Monitoring and Reporting Program should be changed to reflect the California Water Code, as discussed above. Section A.1. (ii) should be deleted and replaced with **"overflows or releases of wastewater that do not reach State waters but are a nuisance."** Also, the second sentence in Section A.1. (iii) should be deleted. Discharges from private parties into public right-of-ways are not under the jurisdiction of this permit; rather, they are covered under the County of Orange stormwater permit (MS4). While this notification definition will overlap with cities that have jurisdiction over local stormwater systems, they are not applicable to the OCSD or dischargers that do not have jurisdiction over the local stormwater system. Alternative language in the Monitoring and Reporting Program could read: "**Agencies that have jurisdiction over local stormwater systems in the area of private party spills are required to report private party overflows or releases of wastewater that reach State waters or create a nuisance pursuant to this Monitoring and Reporting Program."**

Response:

WDRs changed.

28. Comment:

Also, please insert the following language from the General Waste Discharge Requirements at the end of the definition of sanitary sewer system (A.2.) in the Monitoring and Reporting Program: **"Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, highlines, etc.) are considered to be part of the sanitary sewer system, and discharges of sewage to these facilities are not sanitary sewer overflows, provided that sewage from these facilities is not discharged to waters of the State."**

Response:

WDRs changed.

28. Comment:

To clarify record-keeping and request protocol, please add the words "in writing" or "required by this permit", to the sections of the General Waste Discharge Requirements and the Monitoring and Reporting Program, as shown below:

- General Waste Discharge Requirements – Section B. 11., "…make it available to any member of the public upon request in writing;"

Response:

WDRs changed.

29. Comment:

- General Waste Discharge Requirements – Section E. 1., "The discharger shall furnish to the Executive Officer within a reasonable time, any information required by this permit which the Executive Officer may request;"

Response:

This requirement incorporates Section 13267 of the California Water Code so that a failure to submit requested information, will be a violation of the order.

30. Comment:

- Monitoring and Reporting Program – Section B. 2, "Records shall be maintained by the discharger for a minimum of five years from the date of the sample, measurement, report or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested in writing by the Regional Board Executive Officer."

Response:

Please see the changes in the proposed order. The Executive Officer will make the request in writing.

30. Comment:

- Monitoring and Reporting Program – Section B.3, "All records required by this permit shall be made available for review upon RWQCB staff's request."

Response:

Comments noted.

31. Comment:

To make Section B.4. of the Monitoring and Reporting Program more succinct, OCSD suggests more generally referring to reports and plans required by the permit and then listing out additional requirements. Below is the suggested rewritten section.

4. The discharger shall retain records of all SSOs, including, but not limited to:

   a. Copies of all reports and plans required by this Order;
   b. All calibration and maintenance records. All monitoring instruments and devices which are used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy;
   c. All original strip chart recordings for continuous monitoring instrumentation;
   d. SSO and service call records, and complaint logs of calls received by the discharger;
   e. SSO records;
   f. Descriptions of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);
   g. Work orders from the previous 3 years which are associated with responses and investigations of system problems related to sanitary sewer overflows;
   h. Lists and descriptions of complaints from customers or others from the previous 3 years; and
   i. Documentation of performance and implementation measures for the previous 3 years.

Response:

Comments noted.

32. Comment:

Monitoring and Reporting Program – Section C. 2. lists the information requested in the initial report of a discharge to the RWQCB. Because of the diverse nature of SSOs and their emergency nature, sometimes the discharger does not know the answers to all the information items listed within the first 24 hours following an SSO, especially all the corrective action items. Therefore, OCSD requests that the language "if known at the time" be added so the sentence will read**, "The information reported to the Regional Board in the initial telephone, voice mail, FAX, or email report shall include, if known at the time."** Additional information will be reported if it is known.

Response:

WDRs changed.

33. Comment

Monitoring and Reporting Program – To be consistent with the AB285 reporting requirements, insert **"or private property owner"** at the end of Section C.2.a.

Response:

WDRs changed.

34. Comment:

Monitoring and Reporting Program – Because SSO volume calculations are often based on best field estimates, observations, assumptions, and very rough field calculations, the requirement to submit tabulations of calculations should be listed as part of the final report submittal (C.6), not the initial report (C.2). Similarly, C.2, h., k., and l. are more appropriate for the final report requirements in C.6.

Response:

The field staff should be able to estimate the flow and indicate how the flow was estimated.

35. Comment:

Monitoring and Reporting Program – OCSD requests deleting C.2.i. since it is duplicative to C.2.d. The details of the storm drain locations are more pertinent

to the final report. The initial SSO calculations by the field staff and the requirements of C.2.d. will address the immediate storm drain questions.

Response:

WDRs changed.

36. Comment:

Monitoring and Reporting Program – OCSD requests that Section C.2.f. regarding calculations of wash water and sewage-contaminated wash water be deleted. These calculations would not be ready for an initial report; they are more appropriate for the final report. OCSD understands that some agencies are not collecting their wash water and handling it as they do spilled sewage. However, performing such onerous calculations on every SSO won't necessarily get to the root of the problem. It is very difficult to calculate SSO volumes since there are no standard methods for doing so. Calculating wash water and tainted water volumes will be even more difficult and very inconsistent. OCSD suggests incorporating a yes/no confirmation question in the reporting format (e.g., "Was all wash water and sewage-tainted water contained, collected and otherwise treated in accordance with raw sewage procedures?")

Response:

Field staff should be trained to estimate spill volumes and report this to the Regional Board.

37. Comment:

Monitoring and Reporting Program – In order to make the quarterly report requirements as succinct as possible, OCSD suggests referencing submitting all previous requirements in addition to any extra information. Below is the suggested rewritten language for Section C.7. In addition, OCSD has added a list of standardized causes that are compatible with the State Water Resources Control Board's AB285 database. Reports should also be allowed via CD-ROM and e–mail (assuming reasonable size constraints). Delete the word "floppy" in C.7 (i and j) so that either media may be submitted.

1. The discharger shall submit quarterly reports of all SSOs. The quarterly report shall provide the following information for each SSO.

a. All the info requested in C. 2 and listed on Sanitary Sewer Overflow Form attached to Monitoring and Reporting Program No. 01-99;

b. How the SSO volume was tabulated;
c. Picture(s) of spill required in C.2 e;
d. Cause or suspected cause of the overflow. Choose all that apply from a list of standardized causes: infrastructure failure (specify leak, insufficient capacity, damaged/broken pipe), blockage (specify grease, roots, debris, vandalism, or identify which multiple causes), pump station failure, significant wet weather event, natural disaster, or other.
e. Where the spill entered into the storm drain inlet;
f. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow, and a schedule of major milestones for those steps;
g. Steps taken or planned to mitigate the impact(s) of the overflow, and a schedule of major milestones for those steps.
h. Any additional correspondence and follow-up reports, as necessary, to supplement the Sanitary Sewer Overflow Report Form and to provide detailed information on cause, response, adverse effects, corrective actions, preventative measures, or other information.
i. Enter the data on a computer disk or spreadsheet attachment to email in the format described below for submission to the Regional Board at the end of the quarter.

j. An IBM-PC DOS compatible disk or email, containing the data described below on all sanitary sewer overflows for the quarter shall be submitted quarterly with a certification statement described in Provision No. G.18 of Order 01-99.
k. The disk shall be 3 1/2 inch, double sided, high density formatted for 1.44 MB or a CD-ROM. The information submitted shall be fully compatible with Microsoft EXCEL version 5.0. In order to safeguard the integrity of the information submitted on disk against errors caused by accidental changes, all information should be write protected. This can be done with Microsoft EXCEL version 5.0 by choosing "Protection" from Tools Menu, and choosing "Protect Sheet". If more than one sheet is created, protect every sheet with the same password. Any form of data protection may be used which will allow Regional Board staff to open the file and copy the data to a new file. This procedure will safeguard the integrity of information submitted on computer disk to the Regional Board. An EXCEL template of the database will be supplied.
l. The disk shall be labeled with:
    1. The dischargers name;
    2. Monitoring and Reporting Program No.01-99;

3. The quarter and the year; and,
4. The software format.

m. Each sanitary sewer overflow shall be reported in a separate record in the file. Nonnumeric data shall be entered in capital and lower case letters.

n. The required fields for each record shall be in a format compatible with the SWRCB's SSO database.

Response:

WDRs changed.

38. Comment:

Monitoring and Reporting Program – OCSD requests that C.9. be deleted. Capacity issues have not been a historical problem in OCSD's service area. Running these statistics each month is not a productive exercise since it is more efficient for the RWQCB staff to compile the spreadsheets and run a more powerful, less limited analysis of the quarter's SSOs. Each quarter will have different characteristics that are not reflected in this request for statistics. In addition, this information is inherent and redundant to the SSO causes.

Response:

WDRs changed.

39. Comment:

OCSD understands that RWQCB and OCHCA policies recommend not disinfecting SSOs. Therefore, OCSD requests that the permit state this policy as well as a reference that all sewage and wash down should be collected. Also, if the SSO needs to be disinfected to protect public health, as with any SSO remnants, the wash-down disinfected water should never be discharged to a storm drain.

Response:

WDRs changed.

40. Comment:

Upon adoption of the new collection system waste discharge permit, OCSD will replace its current procedures, including submitting a 5-day letter on large spills, in accordance with the procedure outlined in this permit.

Response:

WDRs changed.

5.0 Los Angeles County Sanitation District

Comment:

Staff from the Los Angeles County Sanitation District (LACSD) participated in the workshops held by Board staff during the development of the proposed WDRs and submitted a comment letter dated December 14, 2001. LACSD reiterated these comments during the January 23, 2002 Public Workshop before the Board. LACSD's comments concern issues similar to those expressed in the previous comments, regarding the definition of an SSO, clarification regarding storm drains and surface waters, and when an SSO is fully contained and cleaned up.

Response:

As discussed above, staff has made changes to the proposed WDRs in response to each of LACSD's comments, as outlined in their December 14, 2001 letter.

6.0 Tri-TAC (Technical Advisory Committee to the League of California Cities, California Association of Sanitation Agencies, and the California Water Environment Association)

1. Comment:

TriTAC notes that 99.5% of the available beach mile days were unimpacted by SSOs, in order to recognize the high quality of sewage conveyance facilities already being provided in the region.

Response:

Comment noted.

2. Comment:

Prohibition of SSOs. TriTAC rrecommends deletion of Prohibition No. A.1, and made comments similar to USEPA regarding prohibiting all SSOs, as opposed to staff's proposal to only prohibit discharges of sewage to surface waters, as required by the Basin Plan.

Response:

See response to USEPA comment No. 7. See also response to GGSD comment No. 7, regarding a zero discharge standard. Staff is recommending the Board include the Basin Plan prohibition language in the WDRs as the only waste discharge requirement, in order to ensure compliance with this prohibition.

3. Comment:

Requests clarification of the definition of an SSO.

Response:

WDRs changed in response to this and other similar comments.

4. Comment:

Enforcement Discretion. Requests for clarification to be included in the WDR to address SSOs that are contained and do not pose a threat to public health.

Response:

WDRs changed in response to this and other similar comments.

5. Comment:

Supports the WDRs approach to the relationship between OCSD and the co-permittees.

Response:

Comment noted.

6. Comment:

Consistency with EPA SSO rule, SWRCB SSO CMOM, and AB285 reporting requirements.

Response:

WDRs changed in response to this and other similar comments.

7.0 City of Tustin

The City of Tustin informed staff that they do not own any part of the sewage collection system, and that OCSD owns and operates the system for the City.

Response:

WDRs changed.

8.0 Irvine Ranch Water District

IRWD made comments on the differing definitions of an SSO and clarified what types of oils and greases should be covered by the WDRs.

Response:

Staff changed the SSO definition and has clarified the FOG program requirement.

9.0 Neozyme International, Inc.

Neozyme provided information on its products that they believe can economically control grease blockage problems in sewage collection systems.

Response:

Staff appreciates the information. This may provide a cost effective control for grease problems, if properly implemented.

10. Santa Ana River Discharger's Association (SARDA)

SARDA made comments similar to USEPA and GGSD regarding definitions of an SSO, prohibition of all SSOs, discharges to surface waters, and other comments. See responses to those comments above.

11. City of Huntington Beach

The City generally supports the proposed WDRs, and expressed concerns about the grease control program requirement. The City suggests the County lead such an effort.

Response:

Comments noted. Staff also supports the City's efforts on the steering committee, with OCSD as the lead, to develop a county wide grease control program.

12. Restaurants

Staff, and Governor Davis, received many letters from restaurant owners from the City of Garden Grove, all of which objected to the draconian requirement in the proposed WDR requiring them to install grease traps or interceptors. There is no such requirement in the proposed WDRs. See response to comments above regarding the FOG requirements in the proposed WDRs. Please note that the requirements for a grease control program are on the public sewage collection agencies, not on restaurants.

13. California Water Environment Association

CWEA President –Elect Denis Pollak presented his January 22, 2002 comment letter to the Board during the January 23, 2002 Public Workshop, expressing CWEA's support for the proposed requirement in the WDR to have a validated training program for sewage collection system operators. Mr. Pollak noted the CWEA certification program is validated and meets all State and Federal requirements to provide certification, and is used by many agencies as a voluntary measure of staff competency.

Response:

The CWEA program is an excellent example of a training program that would meet the requirements in the proposed WDRs.

14. Comments Made During the December 19, 2001 Public Workshop

On December 19, 2001 the Regional Board held a Public Workshop to receive evidence and testimony on the proposed WDRs. Due to time limitations, only two people testified, and the Board continued the workshop until their January 23, 2002 meeting. Ken Greenberg from USEPA and Ben Horenstein from Tri-TAC summarized their agency's comment letters discussed above.

Ken Greenberg, USEPA

Comments:

Mr. Greenberg also expressed USEPA's full support for the Board's adoption of the proposed WDRS, and made additional comments regarding the schedule for implementation, the need to protect public health from the impacts of SSOs and to protect beach water quality, and the importance of the Board supporting

requirements for the sanitation agencies to provide reasonable protection of the valuable public infrastructure.

Response:

Staff would like to thank Mr. Greenberg for his assistance in the development of the WDRs, and conducting the audits of the sewage collection systems. He has made major contributions to the order, the monitoring and reporting program, the staff report. The responses to his comments above include discussions of the threat to public health from SSOs. We agree with him that the main purpose of the WDRs is to ensure protection of beach water quality from the adverse impacts of discharges of raw sewage to waters of the U.S. Staff is also aware of the immense amount of money that has been invested in the sewer system infrastructure and the need to maintain these valuable public resources. Besides the obvious benefit of preventing sewage spills and discharges of sewage to surface waters, a properly operated and maintained sewage collection system provides many public health and economic benefitsy. As a recent study by the State Controller's Office noted, "for every dollar invested in infrastructure, there is $2.50 in economic activity returned to the area." Additionally, restaurants loose money whenever they are closed by the Health Department because of a sewage backup and overflow.

With regards to the schedule of implementation, the schedule has been changed in a manner consistent with Mr. Greenberg's suggestions. The schedule now requires the submittal of the spill response plan much sooner than previously proposed, as well as the routine maintenance plan.

Ben Horenstein, Tri-TAC

Comments:

Mr. Horenstein focused his testimony on the issue raised in the Tri-TAC comment letter, discussed above, regarding the prohibition of sewage discharges to surface waters that result from a wet weather event in excess of the design criteria used in the wastewater industry. Typically, sewers are designed to handle an increase in flow that could result during a 10-20 year storm event, as well as other peaking factors. Rainfall events in excess of the design criteria may result in sewage spills that result in a discharge to surface waters, and that is an acceptable risk accepted in the design and operation of a sewage collection system. Mr. Horenstein recommended the Board adopt the proposed WDRs without the prohibition, or to change the order to clarify how the order will be enforced in such instances. He believes the affirmative defense sections of the

WDRs should not apply to a sewage discharge resulting from factors outside the design basis.

Response:

This comment is a very good summation of the surface water discharge prohibition, as discussed in response to similar comments made by USEPA, GGSD, OCSD, LACSD, and many others. Staff believes that the changes made to the proposed order in response to this issue provide a reasonable resolution to the concerns expressed about liability for discharges of sewage beyond the control of the discharger. Staff to address these kinds of situations, vandalism, and acts of God, included the affirmative defense sections. No sewage collection agency has bolted down its entire manhole covers to prevent all acts of vandalism, but agencies are expected to provide this kind of protection in areas of chronic vandalism. The same is true for the peak design flow used by an agency. Each agency may use slightly different factors for differing conditions, especially for sewers that are placed under water, but every sewer system must meet some minimum standards. One purpose of the order is to have each sewer system demonstrate how their system is designed, operated and maintained, in order to show that they are doing everything they can to prevent SSOs and discharges of sewage to surface waters. So that when there is a sewage discharge resulting from one of these factors, the Board can consider the design, operation, and maintenance of the sewer system as part of its consideration of appropriate enforcement action.

15. Comments Made During the January 23, 2002 Public Workshop

During the January 23, 2002 Public Workshop OCSD, GGSD, and CWEA summarized their written comments, which are responded to above.